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ABSTRACT

This curriculum guide contains materials for a 1-semester high school course designed to introduce students at the 9th or 10th grade level to technology in the workplace. The course gives students hands-on experiences, knowledge about changes in the workplace, and exploration of career opportunities associated with those changes. The nine units of the course cover the following topics: (1) the changing world of work; (2) personal inventory; (3) midlevel technology careers; (4) self-esteem; (5) job searching skills; (6) life skills; (7) making college study a reachable goal; (8) entrepreneurship; and (9) study skills. Three appendixes contain a list of resources, handouts for the activities in the course, and background articles and documents. Units consist of information sheets, student activities, checklists, quizzes, and answer keys. (KC)

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ED 360 535

INTRODUCTION TO TECHNOLOGIES

Preparing Students For Mid-Level Technology Careers

Teacher's Guide

CE 064 308

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Introduction to Technologies

..preparing students for Mid-Level Technology Careers

TEACHER'S GUIDE

developed by:

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The Partnership for Academic and Career Education expresses appreciation to the following educators for their assistance in the development of this course:

Betty Palmer, Crescent High School
Charles Lawson, Crescent High School
Wayne Sibbett, Walhalla High School

(September, 1990)

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RATIONALE

Education in South Carolina and America must provide students with an awareness and understanding of careers being added or changed in the workforce due to technology. Technological changes in the workplace necessitate proper academic and vocational preparation.

Jobs being created in the workforce will require much more than the simple basics of reading, writing, and arithmetic. New "basics" will require employees to:

- solve various problems which do not have a standard solution;
- carry out instructional processes which may be oral, written, diagrammatic, or a combination thereof;
- perform mathematics-related problems requiring higher levels of mathematical ability with algebra and geometry skills as a minimum;
- have a greater understanding of a wider scope of subjects ranging from the simple to the complex.

COURSE GOALS

The Introduction to Technologies course is designed to:

- provide manipulative and experiential activities that give students insight into vocational and mid-level technology careers;
- help students fully understand the importance of a proper high school education in preparing for a career or pursuing postsecondary education;
- help students develop a greater awareness of their own personal skills, abilities, likes, and dislikes;
- provide students with an opportunity to explore career-related topics such as job searching skills, life skills, making college education a reachable goal, and study skills;
- allow students to examine self-esteem and the impact self-esteem has on self-perception;
- develop fundamental technology skills through hands-on, experiential activities.

FOREWORD

Introduction to Technologies is a new course designed to provide hands-on experiences; knowledge about changes in the workplace; and exploration of career opportunities associated with changes in the workplace. Students are given the opportunity to explore careers and career-related information through various activities such as interviews, guest speakers, and on-site visits to businesses and industries and local colleges as well as through classroom activities.

Introduction to Technologies goes further than just giving students an understanding of career opportunities. This course also covers such areas as self-esteem and the associated effect upon selecting a career; study skills and how to get the most out of high school; and ways of making a college education possible among others.

Introduction to Technologies is designed as a semester course to be taught at the ninth or tenth grade level. However, the units in this course can be broken apart and used as supplemental materials for courses already in place within the school setting. There is no set textbook for this course. However, it is highly recommended that the book WORKING: Today and Tomorrow, copyright 1987, from EMC Publishing be obtained if at all possible (See list of Unit I Resources for ordering information). This book can serve as an additional resource to the units covered in Introduction to Technologies.

Since Introduction to Technologies is a semester course, it is recommended that students enroll in a computer class for the other half of the school year. Knowledge of computers is a necessity in today's workplace because of the advancements in technology. By combining Introduction to Technologies and the development of computer skills, students will gain a greater understanding of the basic requirements to be successful in the ever changing workplace.

The following is a synopsis of each unit for Introduction to Technologies.

Unit I--The Changing World Of Work

Today's workplace is vastly different from that of yesterday and tomorrow's workplace will be different from today's. Students must be made aware of how and why these changes have and will occur and provided with an understanding of what they must do now to ensure themselves of a place in the workforce of tomorrow.

Unit II--Personal Inventory

Very often students seek employment which does not necessarily fit their skills and/or interests. Being happy in the workplace means analyzing personal skills and abilities to determine strengths and weaknesses and then identifying compatible careers.

Unit III--Mid-Level Technology Careers

The impact of technology upon the workplace has created new careers. More often than not, these careers fall into the mid-level range, those which require some postsecondary education but not necessarily a four-year degree. Students must be made aware of these careers and the fact that these careers offer excellent salaries and opportunities for advancement without the requirement of a bachelor's degree.

Unit IV--Self-Esteem

Self-esteem is an important factor in how people perceive themselves and their ability to accomplish personal goals. Helping students feel good about themselves and providing opportunities for them to make improvements will create greater self-confidence to seek careers which were once only part of a dream.

Unit V--Job Searching Skills

The first impression applicants often make upon prospective employers is through either a letter of application or a job application. Personnel managers are telling educators that prospective employees cannot successfully complete a job application. As a result, prospective employees are often perceived as lacking skills needed to be successful in the occupation for which they have applied.

Unit VI--Life Skills

Life skills involve more than being able to write checks and balance a checkbook. These skills include a basic understanding of housing, transportation, borrowing money, insurance, and employee benefits. All of these, and more, affect the amount of "real money" an individual will have to lead a comfortable life style. Comfortable lifestyle is closely related to the career chosen and the level of education attained.

Unit VII--Making College Study a Reachable Goal

Employment in the future will require formal educational studies beyond high school. In fact, "by the year 2000, the average job in the Southeast will require almost fourteen years of formal education" (The Southeast's 21st Challenge, U.S. Department of Labor, Spring, 1990). Many students, and their parents, may not have the means by which to finance the cost of a postsecondary education either on the two- or four-year level. Various options for financing a postsecondary education are now in existence. An increased awareness of these options will help students to realize postsecondary education is no longer just a dream, but can become a reality.

Unit VIII--Entrepreneurship

Students often dream of owning their own business. More often than not, they see only the glamour side of "being your own boss." Students are not aware of all the "hidden" details that must be taken into consideration as the owner of a business. Insight into the many different and often cumbersome details associated with owning a business may help some students realize ownership is not for them while others may come to just the opposite conclusion.

Unit IX--Study Skills

Students often complain about not having enough time to complete homework assignments, spend time with friends, and hold a part-time job. If students are shown how to maximize their time, they will realize that very often several valuable hours are wasted each day. By analyzing the way their time is spent, students will see that by adjusting their present schedules they will be able to accomplish more in the same amount of time.

APPENDIX A

Appendix A contains a list of resources which teachers can use to gain additional information regarding the various units in Introduction to Technologies. Many of these resources are located in the PACE office and can be checked out by teachers. This is by no means an exhaustive list of resources. Teachers may have other sources of materials they can integrate into the course. Anyone interested in checking out materials located in the PACE office can call 646-8361 ext. 2107.

APPENDIX B

Appendix B contains copies of handouts which must be used to complete many of the activities in Introduction to Technologies. These handouts may be used as given or may be modified by the teacher and/or students. Teachers are encouraged to supplement the handouts with other relevant material.

APPENDIX C

Appendix C is a compilation of articles, documents, and publications which will provide teachers with some background information about changes occurring in the workplace. These materials are intended to give teachers a better understanding of why students need to be made aware of the new and emerging careers in the workplace.

Also included in Appendix C is a copy of _The Guide to Area Business Speakers_ published by PACE. This guide lists area business professionals who are willing to address student groups and the topics the speakers will discuss.

UNIT I
THE CHANGING WORLD OF WORK

MAJOR CONCEPT The world of work is constantly changing due to the impact of technology upon the work environment.

TOPICS

1. jobs of the past, present, and future
2. future employment projections
3. impact of technology on the workplace
4. skills needed for success in today's workforce
5. the impact of technology on the global workforce
6. oral and written communications as critical skills for the world of work

BEHAVIORAL OBJECTIVES

At the conclusion of this unit, the student will be able to:

1. define global economy and the international workplace;
2. compare and contrast jobs of the past, present, and future;
3. discuss data relating to employment projections of the future, including, but not limited to, career opportunities that will decrease in availability, remain constant, or increase in availability;
4. explain the role of technology in changing the local, national, and international workplace;
5. use the South Carolina Occupational Information System (SCOIS) to obtain career-related information;
6. define transferable skills;
7. explain the relationship between transferable skills and job retention/promotion;
8. make oral and written reports to the class.

ACTIVITIES

1. Have students begin a careers notebook for themselves. This notebook should be used to store information presented throughout the course. Students will be able to use this compilation of information during their high school years to help in setting goals for plans upon completion of high school.

2. Have students compare and contrast projections for selected occupations in the local county, state, and nation. Provide students with handouts that summarize these projections. **(See Resource List in APPENDIX A for possible sources of information. Also, a handout entitled "Growth in Occupations 1988-2000" is in APPENDIX B.)**

3. Lead students through a discussion of the role written and oral communication skills play in presenting information to groups on the job. Explain to students that these skills will be developed as a part of this course. At various times throughout the course, students will be asked to make oral and/or written reports to class members.

   Explain how oral reports can be enhanced by use of:
   - --overhead transparencies;
   - --posters;
   - --displays;
   - --handouts.

   Discuss the fact that oral reports give information in summary form where as written reports present more detailed information. Also, written reports can be filed and used as reference materials at a later date.

4. Have students trace the changes that have occurred in the workplace over the past century. This activity can be enhanced by separating students into groups with each group selecting a topic to research. Suggested topics include:
   - --comparison and contrast of agrarian, manufacturing, and service societies;
   - --how the American society has changed;
   - --the role of technology in causing changes in the American society;
   - --the impact of technology upon jobs of the future;
   - --global economy and international workplace.

   After each group has completed its research, a group paper should be given to the teacher. Oral reports should be used to present information to the class, as well as having a written summary for students to include in their careers notebook.

5. Have students collect job advertisements from local newspapers and analyze the ads to determine what types of skills are required for entry into a specific occupation. Tell students to pay special attention to ads regarding industrial/engineering, allied health, public service, and business careers. Students should be encouraged to search for ads referencing two-year degrees. **(APPENDIX B contains handouts with job ads. These handouts can be duplicated and given to students for this exercise.)** However, by searching the newspapers, ads which highlight careers of interest to the students can be selected.

   Students should select one ad and write the personnel manager of the business/industry advertising the position asking for such information as:
   - --specific requirements for entry into the occupation;
   - --types of skills (communications, math, etc.) needed for the job;
   - --opportunities for advancements;
   - --opportunities for future training/education offered by the company.

   Students should explain that this information is being sought as part of a class assignment. Students should summarize findings and report to the class. Also, have students provide a summation sheet for other students to place in their careers notebook. **(The "Researching A Career" sheet can be used for this activity. See APPENDIX B for a copy of this activity.)**

6. Lead students through a discussion of the changing job market and the fact that employees often change careers which may require learning new skills. **(This would be an excellent opportunity to have a guest speaker talk about retraining in the workplace and life-long learning.)**

   Skills learned in one context can and should be transferable to another context. The filmstrip series "Transferable Skills" can be used to help students understand what is meant by transferable skills.

   This series includes sections on:
   - --Making School Meaningful--Transferable Skills
   - --About Transferable Skills
   - --Guidelines for Encouraging Transfer
   - --Activities for Encouraging Transfer
   - --Identifying Transferable Skills

   Using the teacher's guide, have students complete the activities associated with the filmstrip series. **(This series is located in the PACE office and is available for teachers to borrow.)** Emphasize that although many skills seem to be taught in isolated settings, these aptitudes can be transferred to a different setting, allowing a person to apply "old" abilities in a new position.

7. Invite the guidance counselor to give the class an introduction to the South Carolina Occupational Information System (SCOIS). This introduction should include:
    - --the types of information which can be obtained from SCOIS;
    - --when the system is available for student use;
    - --how to utilize the system to gain specific information related to occupational interests.

   After the presentation has been completed, assign students specific tasks to be completed using SCOIS. **(SEE ACTIVITY 8)**

8. Have students begin researching careers, both common and not-so-common, by using the job cards located in **APPENDIX B.** These cards can be duplicated on heavy paper, laminated, and cut apart for use in this activity. (There are 90 career cards so this activity can be repeated several times during the semester.) Have each student select one of the job cards and then research the career using the **"Researching A Career"** sheet located in **APPENDIX B.** Much of the information needed to complete the activity can be found through SCOIS. If possible, post these career sheets in a central location within the school for non-class members to examine.

9. Have students interview a parent, relative, or other individual to gain information about his/her present employment. **(A sample questionnaire entitled "Employee Interview" is included in APPENDIX B or students can create their own.)** Information being sought might include:
    - --how the job/occupation has changed in the past ten years;
    - --new skills learned to remain employed in the occupation;
    - --math, communication and science skills used on the job;
    - --educational background/training.

   Have students share their findings with the class through reports. Written reports should be duplicated for students to place in their careers notebooks.

UNIT II
PERSONAL INVENTORY

MAJOR CONCEPT Personal likes, dislikes, interests, and attitudes play an important role in job satisfaction.

TOPICS

1. likes and dislikes
2. personal attributes/aptitudes
3. interests
4. attitudes and values
5. shadowing an employee

BEHAVIORAL OBJECTIVES

Upon completion of this unit the student will be able to:

1. analyze a personal interest inventory;
2. identify careers which match the student's likes, dislikes, and interests;
3. select two or three careers, based on the personal inventory profile, and research these careers to gain an understanding of the careers;
4. select one career and conduct an interview with an individual employed in this career;
   summarize the interview and report findings to the class;
5. identify factors wanted in a career (ex. salary, advancement opportunities, travel, etc.);
6. explain the difference between needs and wants;
7. explain the meaning of aptitude;
8. define short-, medium-, and long-range goals and identify types of each;
9. explain the role of attitude in securing and keeping a job;
10. shadow an employee for a day and summarize the experience; include such things as work schedule, job duties, workplace skills, etc. **(OPTIONAL)**.

ACTIVITIES

1. Students should complete a personal inventory profile to determine likes, dislikes, hobbies, and interests. Two inventories are School Interest Inventory, by Riverside Publications, a paper and pencil inventory and The Career Compass, by Meridan Publications, a computerized inventory. (Ordering information is provided in the List of Resources for Unit II.)

2. Have students select two careers of interest and complete a careers profile. After the profiles have been completed, have students compare the profiles with their findings from Activity 1. If career choices do not match personal skills, have students look at alternative careers in the same cluster area.

3. Lead students through a discussion of the term "comfortable lifestyle." On the blackboard, list items students feel are necessary to lead a comfortable lifestyle. Once the list has been completed, identify the items as actually being wants or needs. Lead students through a discussion of wants and needs and the relationship between the two.

4. Lead students through a discussion of "job satisfaction." The discussion should focus on the fact that an excellent salary does not necessarily mean job satisfaction. Other factors, such as working conditions, amount of authority, autonomy, and opportunities for advancement also affect job satisfaction. (Have students examine their career profiles from Activity 4 in terms of related job satisfaction.)

5. Lead students in a discussion of goals and goal setting. Define short-, medium-, and long-range goals and planning. Have students set goals of each type. **(Two sources of materials for this exercise are located in Getting Smarter and Learn How to Learn. The related chapter concerning goals, goal-setting, and motivation from Getting Smarter can be found in APPENDIX B. See List of Resources for additional information on ordering these books.)**

6. Have students complete the activity **"Into The Future."** This activity should help students realize the need to begin to prepare early to be successful in their chosen career. **(A copy of this activity is located in APPENDIX B.)**

7. If it can be arranged, have students "shadow" an employee for a day. This employee could be a parent, other relative, or friend. Some industries are hesitant about allowing non-employees in working areas; therefore, it will be necessary to get written permission from the industry for this exercise to be completed.

   Options to the full day of shadowing are:
   - --have students complete this exercise for a portion of the working day.
   - --set up a field trip to a local industry. (Before going on the field trip, have students determine what specific information they will be looking for while on the trip. Remind students they will be making presentations about the field trip.
   - --have students with a part-time job in a technical area, make presentations regarding the types of skills required for their job.

   After students have completed the "shadowing" experience, give them the opportunity to discuss what transpired. Have students write a short report which can be duplicated for other students to put in their careers notebook.

UNIT III
MID-LEVEL TECHNOLOGY CAREERS

MAJOR CONCEPT The greatest percentage of new job opportunities will require some type of postsecondary education.

TOPICS

1. definition of mid-level technology
2. skills needed in mid-level technology careers
3. sources of training for mid-level technology careers
4. role of technicians
5. preparing in high school for further training related to mid-level technology careers

BEHAVIORAL OBJECTIVES

Upon completion of this unit the student will be able to:

1. define and give examples of mid-level technology careers;
2. identify careers classified as mid-level technology careers;
3. select two or three mid-level technology careers and research each to determine the following information:
    --high school preparation;
    --post-secondary education opportunities;
    --salary ranges;
    --projections for availability of jobs;
    --working conditions;
    --needed workplace skills;
    --type of work involved;
4. select one mid-level technology career, conduct an in-depth study of the career, to include an interview, and report findings to the class (include information from objective 3 along with local employment opportunities, advancement opportunities, etc.);
5. visit a local technical college and tour the various departments preparing students for mid-level technology careers;
6. summarize the differences in career opportunities based upon the level of education achieved; high school diploma v. two-year degree v. four-year degree);
7. construct a bulletin board display highlighting various mid-level technology careers;
8. write articles for the high school newspaper which detail mid-level technology careers;
9. summarize a panel discussion of mid-level technology careers, specifically non-traditional careers;
10. identify the "basic skills" needed to be successful in a mid-level technology career;
11. summarize the various vocational/occupational programs offered at the local high school and/or career center.

ACTIVITIES

1. Have students research mid-level technology careers. (Mid-level technology careers are careers which require some educational preparation beyond high school but not necessarily a four-year degree. Students should develop a list of general characteristics which describe mid-level technology careers. Characteristics described should include:
   --level of education required;
   --working relationship with peers (group v. individual);
   --salary ranges;
   --advancement opportunities;
   --type of work;
   --basic skills needed for career competence.

2. Have students identify two or three mid-level technology careers which interest them. Have the students research these careers to find such information as:
   --courses to be taken in high school;
   --types of postsecondary education opportunities which exist;
   --working conditions/duties;
   --salary ranges.

   Most of this information can be found by using SCOIS. Students should summarize their findings and make a report to the class. **(The "Researching A Career" Profile can be used with this exercise.)**

3. Have students select one of the career options from Activity 2 and conduct an in-depth study of the career. If possible, have the student interview someone presently employed in this career. (Before students conduct their interviews, have them write a brief description of what they perceive as skills needed for the career. This will be used later to compare their idea of the career with the actual career.) Students should obtain as much information, from as many sources, as possible. Have the students report findings to the class. Reports should contrast students' perceptions of the career with the realities of the career.

4. Arrange a tour of a local technical college to give students an understanding of the educational programs available at the college and how these programs can prepare students for rewarding careers in the mid-level range.

5. Invite a guest speaker to address the differences in employment opportunities based upon the level of education a person completes. Topics should include the differences in salary, advancement opportunities, and supervisory responsibilities.

6. Have students construct bulletin board displays to highlight mid-level technology careers in the four cluster areas of business, health occupations, human services, and industrial and engineering technology. Suggestions of how to implement this activity are
   - --break class into four groups;
   - --have each group select one of the four cluster areas around which to develop the display;
   - --allow students an opportunity to brainstorm about the type(s) of information they wish to include in the display;
   - --bring students back together as a class to discuss ideas (this will give other groups an opportunity to provide feedback about the ideas selected);
   - --have students make a list of resources to be used in gaining information needed to make the bulletin board display.

   Highlight each of the four cluster areas at different times during the semester. If it can be arranged, place the displays on bulletin boards where all students can see them. **(The "Researching A Career" profiles from Unit I, Activity 8 can be used as part of this display.)**

7. Invite several guest speakers to participate in a panel discussion of mid-level technology careers (Speakers selected should be employees in mid-level technology careers). Teachers may wish to consider the following when inviting guest speakers:
   - --invite employees, not employers, if possible;
   - --invite parents or relatives of students;
   - --invite employees in non-traditional male and female careers (ex. male secretary or female technician);
   - --ask speakers to bring information concerning careers: have students put this information in their careers notebooks.

   The Guide to Area Business Speakers, published by PACE, is an excellent source of speakers. (A copy is included in **APPENDIX C.**)

8. Talk with the high school newspaper advisor and discuss the possibility of starting a "careers corner" in the newspaper. (Students in Introduction to Technologies will write the articles.) This column will be used to highlight mid-level technology careers.

   If the newspaper advisor agrees, group students and have each group select two careers to be highlighted. Each group will be responsible for deciding the type(s) of information to be included in the article, how the information will be collected, and the writing of the article. Set up a time line so each group will have ample opportunity to fully develop each article.

9. Meet with the various vocational teachers at the local high school and/or career center to develop a "buddy system" whereby students enrolled in Introduction to Technologies visit the vocational courses at the high school/career center. While visiting in the various vocational courses, students enrolled in Introduction to Technologies should be given the opportunity to participate in hands-on activities in the lab setting.

   Students should be given the opportunity to experience hands-on activities in each the cluster areas of allied health, business, industrial and engineering, and public service.

   This activity could be conducted at different times during the semester to provide students with the opportunity to visit a course in each of the cluster areas.

10. Arrange a field trip to the local hospital. Since many new jobs are being created in the area of allied health, this trip will give students an opportunity to visit the various departments and learn about health careers in the mid-level range. Before the field trip, have students research health careers and develop a list of questions they would like to have answered while on the field trip.

UNIT IV
SELF-ESTEEM

MAJOR CONCEPT Self-esteem has a major impact upon how an individual perceives himself and his ability to be successful in a given situation.

TOPICS

1. self-esteem impacts the way an individual perceives himself
2. self-esteem impacts a student's school performance
3. self-esteem is one determining factor in career selection
4. self-esteem can be raised with proper nurturing
5. self-esteem is influenced by many factors, including home environment, parental expectations, and school environment

OBJECTIVES

Upon completion of this unit the student will be able to:

1. define self-esteem;
2. discuss ways of reinforcing positive self-esteem;
3. complete exercises on self-esteem;
4. list ways of increasing self-esteem;
5. describe various factors that influence self-esteem;
6. discuss the relationship between self-esteem and the learning process;
7. discuss the role of self-esteem in being successful in a chosen career;
8. compile a personal file containing papers, notes, etc. of which the student is proud.

ACTIVITIES

1. Have students identify an individual they perceive as being successful. Have students make a list of traits they feel have contributed to this person's success. If students do not grasp the idea that this person thinks of himself as a winner, lead the students through a discussion that will bring them to this conclusion. Students should be made aware that individuals can overcome the "odds" and be successful through perseverance.

2. Bring in a guest speaker to present his story of overcoming "the odds" and succeeding even though everything pointed toward failure. Students should compile a list of questions they would like answered before the speaker makes the presentation. The speaker can help students realize success comes as a result of overcoming seemingly insurmountable odds.

3. Have students create a section in the careers notebook called "personal accomplishments." In this section, students should keep materials of which they are especially proud. Examples might include papers with excellent grades, notes of praise from teachers, awards, or other special recognitions.

4. Have students complete the exercise entitled **"Are You Being Manipulated?" (A copy is included in APPENDIX B.)** This activity gives students the opportunity to understand manipulation and how it affects the self-esteem of others as well as themselves. This activity also helps students see manipulation as both passive and active.

5. **The New Model Me** curriculum gives students the opportunity to examine their behaviors and the resulting effect on others. Over 100 hundred different activities are included in the curriculum. The teacher should decide which activities can be used with each class. These activities can be interspersed through Introduction to Technologies as the teacher desires. **(NOTE: Several schools offer The New Model Me as a semester course. Teachers should check with counselors before ordering any materials. The Resource Listing has information regarding ordering the materials.)**

UNIT V
JOB SEARCHING SKILLS

MAJOR CONCEPT Proper job-searching skills preparation increases chances of securing the desired career.

TOPICS

1. proper interviewing techniques are often the selling point in a job interview
2. a concise and properly written resume is essential in job hunting
3. written communications, such as letters of application and resumes, often give the first impression of an individual
4. oral and written communication skills are important in job searching
5. proper researching of career clusters can help minimize the amount of time spent researching career opportunities
6. physical appearance has a major impact on the interviewing process
7. self-confidence can help in marketing yourself

OBJECTIVES

Upon completion of this unit the student will be able to:

1. write a correct letter of application;
2. write a correct resume;
3. explain the significance of good communication skills in securing a job;
4. participate in mock interviews;
5. critique mock interviews;
6. list ways of researching career options;
7. analyze job advertisements in order to know what is presented;
8. summarize a presentation given by an employee of the local job placement agency.

ACTIVITIES

1. Invite a personnel/human resource manager to come and address the class concerning letters of application, resumes, interviews, entry-level requirements, education requirements, etc.

2. Discuss writing resumes and letters of application. Have students finalize a letter of application and resume. If possible, contact several personnel directors and have them evaluate the letters and resumes and provide feedback to the students.

3. Have students complete several different job applications. By using different applications, students will see that companies ask for diverse information. Also, students will see that many businesses and industries require applicants to write a response to a given question. **(Several applications from local businesses and industries have been included in the resource section in APPENDIX B. The names of the companies have been removed so as not to reveal the source of the applications.)**

4. Lead a discussion on communication skills. Emphasize communication as being more than just listening, reading, or writing. Nonverbal cues such as facial expression, body language, and eye contact are "communication skills" which may communicate meanings different from spoken messages.

5. Lead a discussion on proper interviewing techniques then have students participate in mock interviews. Video these interviews so students can critique their performances. Discussion topics should include areas such as tonal quality, posture, dress, punctuality, and grooming.

6. Discuss various ways of locating information about careers. Have students write a brief synopsis of how a person might go about obtaining information from each source. Discuss sources such as newspapers, local employment security office, SCOIS, etc. Have students compile a summary of the types of information that can be obtained from each source. All summaries should be placed in the careers notebook.

7. Have students select job advertisements and analyze the information given in each. Also, have students discuss additional information needed before deciding whether or not to apply for the position. Identify ways of obtaining this information (example: telephone, letter, visit to the company, etc.).

8. Invite a representative of the local job placement agency to address the agency's role in helping businesses and industries secure employees.

9. Job Search Education is a workbook which provides activities associated with the development of job search skills. Sections included are "Exploring What's Out There," "Paper Mountain" (deals with applications, resumes, etc.), and "The Job Interview." This workbook can be used to provide additional activities to help develop job searching skills. (See Resource Listing for ordering information.)

UNIT VI
LIFE SKILLS

MAJOR CONCEPT Life skills are necessary to maintain a comfortable and affordable standard of living.

TOPICS

1. personal finances
2. wages, fringe benefits, deductions
3. insurance
4. credit

OBJECTIVES

Upon completion of this unit the student will be able to:

1. define personal finances;
2. define and explain the significance of a budget;
3. correctly complete checks, deposit slips, check registers, etc.;
4. define work week, hourly rate, overtime, deductions, fringe benefits;
5. explain the reason(s) for purchasing insurance;
6. discuss the various types of insurance;
7. compare and contrast various means of obtaining housing;
8. compare and contrast various means of transportation;
9. discuss the pros and cons of using credit.

ACTIVITIES

1. Have students select a career which was researched in Unit III. Once this career has been selected, students should try to obtain information such as starting salary, hours worked per week, overtime rate for overtime hours, and fringe benefits offered by the company. Fringe benefits should include type(s) of insurance offered (company paid or employee paid) paid/non-paid vacations and holidays, sick leave, retirement plans, etc. (Also, students should try and find the cost of fringe benefits per pay period as well as the amount of taxes taken from gross pay each period. This information will be used in a later activity dealing with personal finances.) If students feel uncomfortable or run into obstacles with this activity, identify a personnel director who may be willing to provide this information. If possible, invite the personnel manager to present this information to the class. All information should be filed in the careers notebook for later use.

2. Invite a guest speaker from a bank or other financial institution to speak about the types of services offered by the institution. Topics should include checking plans, savings plans, including bonds and certificates of deposit, and costs associated with having one or more of these accounts. (This activity will serve as a lead in to Activity 3.)

3. Have student complete a unit on personal finances. This unit should include the development of a budget, completing checks, check stubs/registers, deposit slips, balancing a checkbook, etc. Sample materials for this exercise may be obtained from a local banking institution. Also, discuss with students how keeping accurate financial records will decrease the possibility of overspending a budget.

4. Have student compare and contrast various options for housing including buying a home, renting, and/or sharing a residence. Advertisements from the local newspaper will be very helpful with this activity.

   A way to enhance this activity is to invite a real estate agent to talk with the class about various options available for housing. The agent could help students understand costs associated with obtaining housing. Have students select the type of housing they feel would be most beneficial to them. Once this decision has been made, have students compute a monthly cost for housing. Make sure students include utilities. This information should be filed in careers notebook for use with a later activity.

5. Have students compare and contrast various options for transportation. If an individual lives in a large city there are modes of transportation other than automobile. Alternatives include subway and bus. Students should also be made aware that owning a car means other weekly or monthly expenses including gas, oil, and possibly parking fees.

6. Invite an automobile dealer to come talk with the class about purchasing a car. The dealer may be able to supply information about the various options available and the associated costs. If possible, have the dealer help students determine the cost per month for purchasing "their car." Students should file this information in their career notebooks for use with a later activity.

7. Have students summarize a presentation, by an insurance broker, about the types of insurance and how insurance impacts monthly income. Topics should include automobile, home, life, and health insurance. If it can be arranged, have the insurance broker give students the cost of insuring the car from **ACTIVITY 6** and the housing selected in **ACTIVITY 4.** The broker should also discuss various payment schedules for insurance. Help students see that insurance serves as a protection against an unexpected loss. Students should file this information in their career notebooks for use with a later activity.

8. Have students discuss the pros and cons of credit. Help students realize that credit can be funding for items which can not be purchased under normal financial situations, but unwise use of credit can place a financial strain on a person or family.

9. Have students complete the activity entitled **"Earnings."** This activity brings together the information from activities 1-7. **(This activity is located in APPENDIX B.)** Students should build their gross income upon a forty-hour work week. This activity allows students to construct a monthly income statement detailing the monthly expenditures related to living a comfortable life. This activity should help students realize that low salary jobs may not provide enough income to sustain a comfortable life style. It will also help them to realize the need to complete high school and seriously consider postsecondary educational training.

UNIT VII
MAKING COLLEGE STUDY A REACHABLE GOAL

MAJOR CONCEPT Earning a college degree can be very costly. However, there are opportunities to help make college study a reachable goal.

TOPICS

1. scholarships
2. grants
3. apprenticeship programs
4. cooperative education opportunities
5. transfer programs
6. technical advanced placement
7. industry sponsored opportunities
8. part-time work
9. military

OBJECTIVES

Upon completion of this unit the student will be able to:

1. discuss way of financing a college education;
2. compare and contrast university transfer programs with four-year college programs;
3. explain cooperative education;
4. summarize a presentation on cooperative education;
5. discuss technical advanced placement opportunities;
6. define apprenticeship;
7. discuss the pros and cons of an apprenticeship program;
8. discuss the advantages of gaining job experience while pursuing a college education;
9. discuss the pros and cons of pursuing a college education while enlisted in the armed services;

ACTIVITIES

1. Invite the guidance counselor to make a presentation on the types of financial aid available for college education. The presentation should include grants, loans, scholarships, etc. (A packet of material, entitled "Financial Aid" is located in **APPENDIX B**. This packet was developed by Charles Lawson of Crescent High School. Much of this information is available from the South Carolina Occupational Information System. This information can be duplicated and given to students to be placed in their careers notebook.)

2. Invite the cooperative education director from a local technical college to discuss the role cooperative education can play in obtaining a college education. Ask him/her to bring information describing cooperative education and local opportunities available to students. Have students place all information in their careers notebooks.

3. Invite the human resource manager from an industry which sponsors an apprenticeship program to make a presentation about the program. Have students summarize the presentation to include the pros and cons of apprenticeship programs.

4. Invite the high school counselor to discuss opportunities for technical advanced placement. The counselor should define articulation, how to prepare in high school to achieve the most from the process, what opportunities are available at the local high school and/or career center, how to take advantage of this opportunity, and how technical advanced placement can result in lowering the cost of a college education. If the high school counselor is not comfortable with presenting the technical advanced placement program, invite the counselor from the local career center to make the presentation.

5. Invite a financial officer from a local college, two- or four-year, to discuss financing a college education. This presentation should include alternatives such as transfer programs, working while attending college (not taking a full load each term, but spreading college work over a longer period of time), work-study programs offered by the college, etc.

6. Invite an armed services recruiter to discuss ways of obtaining a college education through the military. The recruiter, if possible, should address all branches of the armed services. The representative can also discuss high school courses that should be taken in preparation for a career in the armed services.

UNIT VIII
ENTREPRENEURSHIP

MAJOR CONCEPT Many individuals prefer owning their own business rather than being an employee.

TOPICS

1. understanding entrepreneurship
2. owning a business means developing an understanding of salary schedules, work schedules, financial record keeping, federal and state tax laws, fringe benefits, etc.
3. starting a business requires financial resources
4. owning a business requires supervisory skills
5. owning a business requires careful study to determine if there is an existing market for the product to be delivered
6. earning a two-year degree in business can provide an edge in starting a company

OBJECTIVES

Upon completion of this unit the student will be able to:

1. define entrepreneurship;
2. discuss the pros and cons of entrepreneurship;
3. interview an owner of a business; summarize the interview and report the findings to the class;
4. summarize a presentation made by a bank official about securing funds to finance a business;
5. discuss supervisory skills;
6. identify sources of information concerning starting a business;
7. discuss the advantages of a two-year degree in business on starting a company.

ACTIVITIES

1. Have students research the concept of entrepreneurship and make presentations to the class. This activity could serve as a group exercise giving students the opportunity to work together to solve a problem.

2. Have student complete the activity **"Entrepreneur Survey."** This activity allows students to interview an individual who owns a business. (Some of the background information can be found on SCOIS.) Once the questionnaire has been completed, have students present findings to the class. Written summaries can be provided for students to place in their careers notebooks. (Remind students to inform the person being interviewed this is part of a class assignment and to schedule the interview at the owner's convenience.)

3. Group students and have each group write a state agency to obtain information regarding rules and regulations for starting a small business. (A copy of the booklet **"Fact Sheet for Starting a Small Business" (See APPENDIX B)** gives the addresses of agencies which can be contacted.) Each group should present its findings to the class. The class can compile a composite report which can be placed on file in the library or guidance office for other students to reference.

4. Invite a member of the Chamber of Commerce to come talk about local requirements for starting a small business. Before the speaker comes, students should compile a list of questions to be answered during the presentation. Ask the speaker to bring information about small businesses. Have student place this information in their careers notebook

5. Have students complete the **"Some Points to Consider Before Starting Your Business"** survey located in **APPENDIX B**. This provides students an opportunity to answer questions regarding starting a small business.

6. Lead students through a discussion of the **"Summary of Loan Application"** activity. (See **APPENDIX B for a copy of the document.)** This activity outlines the process for completing a loan application for starting a small business and the types of information required before the application can be processed.

UNIT IX
STUDY SKILLS

MAJOR CONCEPT Proper study and time management skills can increase a student's performance in the classroom.

TOPICS

1. study skills involve more than just reading materials and completing homework assignments
2. preparing and following a daily schedule can help focus attention on required studying
3. a student's attitude impacts academic success
4. being academically successful is the responsibility of the student
5. learning styles govern study habits

OBJECTIVES

Upon completion of this unit the student will be able to:

1. keep a weekly log of activities to determine areas of weaknesses in study habits;
2. analyze weekly logs of activities to determine areas that can be improved;
3. design a weekly study schedule;
4. complete a survey concerning study skills and study habits;
5. complete additional activities in learning how to learn;
6. analyze a learning style survey and determine his learning style.

ACTIVITIES

1. Have students complete the activity "Are You In Control?" The video, Study Skills: How to Manage Your Time, is an excellent way to introduce this activity. (This video is located in the Learning Resource Center at Tri-County Technical College and is available for teachers to check out.) In this activity students will analyze their study skills. The suggestions for managing time will give students an opportunity to start thinking about ways to improve their study skills. **(A copy of the activity can be found in APPENDIX B.)**

2. Have students complete a learning style questionnaire. Discuss the various learning styles and how styles affect ability to learn. **(A questionnaire, consistency key, and learning style profile are located in APPENDIX B.)**

3. Have students begin keeping a log of their daily routines to determine how days are spent. This log should be reviewed and discussed weekly to give students an opportunity to focus on daily activities and the need to set up a time schedule for studying. **(A sample log, entitled, "Weekly Activity Log," is located in APPENDIX B. This sheet should be given to students for use during this activity. Make sure students understand the first few logs will be used for analysis purposes only. All logs should be filed in the careers notebook.)**

4. Have students design a schedule to organize daily activities. Students should make notations on the schedule when it is altered. Weekly reviews should be conducted to provide students with an opportunity to develop a schedule they can use each week. Students may need to adjust their schedules several times during the year as activities (i.e. basketball, baseball, etc.) are added to or removed from daily routines. **(Students can use the "Weekly Activity Log" sheet to complete this activity.)**

5. The book GETTING SMARTER: Simple Strategies to Get Better Grades is an excellent source of activities on improving study skills. The activities in this book can be reproduced for "noncommercial classroom use." Chapters include "Getting Organized," Scheduling Your Time," (which can be used with activities 3 and 4) and "Taking Notes." **(See Resource Listing for ordering information.)**

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT I--THE CHANGING WORLD OF WORK

*South Carolina Employment Security Commission. South Carolina Labor Market Review, Columbia, SC. August 1989

*South Carolina Employment Security Commission. South Carolina Employment Trends, Columbia, SC. August 1989

*South Carolina Employment Security Commission. South Carolina: Job Search Assistance Guide, Columbia, SC. February 1989

**Campbell, Richard and Thompson, Mary J. WORKING: Today and Tomorrow. St. Paul, MN: EMC Publishing

**Abram, Robert E.; Covert, Barbara; and Kitchen, Kate. Transferable Skills. Columbus, OH: The National Center for Research in Vocational Education

**Krannich, Ronald L. Careering and Re-Careering for the 1990's: The Complete Guide to Planning Your Future. Manassas, VA: Impact Publications

***Dealy, William J. Keynote Address 1989 Annual Conference of the Personnel and Training Associations of Anderson, Oconee, and Pickens Counties, South Carolina, August, 1989

*This material can be obtained from the South Carolina Employment Security Commission, Labor Market Information Division, 1550 Gadsden Street, P. O. Box 995, Columbia, SC 29202.

**This material is located in the PACE office and can be checked out by teachers.

***A copy of this presentation is located in **APPENDIX C.**

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT II--PERSONAL INVENTORY

*Ohme, Herman. *Learn How to Learn*. Los Altos, CA: California Education Plan

*Greene, Lawrence and Jones-Bamman, Leigh. *Getting Smarter*. Belmont, CA: David S. Lake Publishers

*Jensen, Eric. *Student Success Secrets*. New York, NY: Barron's Educational Series, Inc.

*McGinnis, Alan Loy. *CONFIDENCE: How to Succeed at Being Yourself*. Minneapolis, MN: Augsburg Publishing House

*Brewner, Margaret, et. al. *Attitudes on the Job*. New York, NY: Educational Design, Inc.

**Cottle, William C. *School Interest Inventory*. Chicago, IL: Riverside Publishing Company

***Teal, Jack D. and Hartwig, Daryl. *Career Compass*. Bloomington, IL: Meridan Education Corporation

*This material is located in the PACE office and can be checked out by teachers.

**The prices for ordering the *School Interest Inventory* are

100 test booklets	$66.00	(Code # 9-62335)
Examiner's Manual	4.50	(Code # 9-62332)
Scoring Masks	6.60	(Code # 9-62333)

The address is
Riverside Publishing Company
8420 Bryn Mawr Avenue
Chicago, Illinois 60631
800/323-9540

***The *Career Compass* can be ordered from:

Meridan Education Corporation
205 East Locust Street
Bloomington, IL 61701

The cost of the program is $90 and is available for use with IBM, TRS-80 or APPLE computers.

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT III--MID-LEVEL TECHNOLOGY CAREERS

*Dealy, William A. Keynote Address 1989 Annual Conference of the Personnel and Training Associations of Anderson, Oconee, and Pickens Counties, South Carolina. Tri-County Technical College, August 1989

*Partnership for Academic and Career Education. A Guide to Area Business Speakers: A Resource for Teachers and Counselors. Pendleton, SC: Tri-County Technical College

*U. S. Department of Labor. The Southeast's 21st Challenge. Atlanta, GA: U. S. Department of Labor

*Guidance Associates. Careers in Health Services: Opportunities for You. Mount Kisco, NY

**Fales, James F.; Kuetemeyer, Vincent F.; and Brusic, Sharon. Technology Today and Tomorrow. Mission Hills, CA: Glencoe Publishing Company

**Krannich, Ronald L. Careering and Re-Careering for the 1990's: The Complete Guide to Planning Your Future. Manassas, VA: Impact Publications

/*Hull, Daniel M. and Prescott, Carolyn A. High-Technology Careers: A Guide for Counselors. Waco, TX: Center for Occupational Research and Development

**Southworth, Scott. Exploring High Tech Careers. New York, NY: Rosen Publishing Group

**Campbell, Richard and Thompson, Mary J. WORKING: Today and Tomorrow. St. Paul, MN: EMC Publishing

*A copy of this publication is located in **APPENDIX C.**

**This material is located in the PACE office and can be checked out by teachers. Also, the Technology Today and Tomorrow textbook is on the list of state adopted textbooks. Teachers may be able to get a set of teacher's materials from the company.

***Check with the guidance counselor to see if a copy of this book is in the guidance office.

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT IV--SELF-ESTEEM

*McGinnis, Alan Loy. CONFIDENCE: How to Succeed at Being Yourself. Minneapolis, MN: Augsburg Publishing House

*Newman, Mildred and Berkowitz, Bernard. How to Be Your Own Best Friend. New York, NY: Random House, Inc.

*Clark, Aminah, Clemes, Harris, and Bean, Reynold. How To Raise Teenagers' Self-Esteem. Los Angeles, CA: Price Stern Sloan, Inc.

*Maiorana, Victor P. How to Learn and Study in College. Englewood Cliffs, NJ: Prentice-Hall, Inc.

*Palmer, Pat. TEEM ESTEEM: A Self-Direction Manual for Young Adults. San Luis Obispo, CA: Impact Publishers

**Rowe, John R., Pasch, Marvin, and Hamilton, William F. The New Model Me. New York, NY: Teachers College Press

*This material is located in the PACE office and can be checked out by teachers.

**The New Model Me is a curriculum within itself. This material is designed to help students look at their behaviors and how these behaviors affect others. Several school districts are using this as a semester course. However, the activities in this curriculum can be used to help enhance self-esteem. The teacher's edition of the book, which includes a copy of the student text, can be purchased for $13.95 (plus shipping and handling). Your local bookstore should be able to get the book. However, if the bookstore cannot order the book, you can order the book from

Teachers College Press
P. O. Box 939
Wolfeboro, NH 03894

ISBN 0-8077-2733-4

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT V--JOB SEARCHING SKILLS

*Partnership for Academic and Career Education. A Guide to Area Business Speakers: A Resource for Teachers and Counselors. Pendleton, SC: Tri-County Technical College

**Krannich, Ronald L. Careering and Re-Careering for the 1990's: The Complete Guide to Planning Your Future. Manassas, VA: Impact Publications

/**Kimeldorf, Martin. Job Search Education. New York, NY: Educational Design, Inc.

/**Brewner, Margaret M., et al. Attitudes on the Job. New York, NY: Educational Design, Inc.

***Chapman, Elwood C., The Fifty Minute Career Discovery Program. Los Altos, CA: Crisp Publications, Inc.

*A copy of this publication is located in **APPENDIX C.**

**This material is located in the PACE office and can be checked out by teachers.

***A copy of this book should be located either in your library or in the guidance office.

****This workbook can be purchased from:

Educational Design, Inc.
47 West 13 Street
New York, NY 10011

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT VI--LIFE SKILLS

*Partnership for Academic and Career Education. A Guide to Area Business Speakers: A Resource for Teachers and Counselors. Pendleton, SC. Tri-County Technical College

**Campbell, Richard and Thompson, Mary J. WORKING: Today and Tomorrow. St. Paul, MN: EMC Publishing

*A copy of this book is found in **APPENDIX C.**

**This material is located in the PACE office and can be checked out by teachers.

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT VII--MAKING COLLEGE STUDY A REACHABLE GOAL

*Campbell, Richard and Thompson, Mary J. WORKING: Today and Tomorrow. St. Paul, MN: EMC Publishing

U.S. Department of Education. Federal Student Aid Fact Sheet. Office of Financial Assistance, Washington, D.C. 20202-5464

Consumer Information Center. Formula Book. Department M-11, Pueblo, CO 81009-0015 1-800-333-4636

Tri-County Technical College. Student Financial Aid. Pendleton, SC: Tri-County Technical College

College Board. College Cost Book. New York, NY: College Board Publications

South Carolina Commission on Higher Education, IBM Building, 1333 Main Street, Suite 650, Columbia, SC 29201

*This material is located in the PACE office and can be checked out by teachers.

NOTE: The financial aid office of local colleges can provide information related to sources of funding for a college education.

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT VIII--ENTREPRENEURSHIP

Small Business Development Center of Clemson, Clemson University Regional Office, 425 Sirrine Hall, Clemson University, Clemson, SC 29634-1301 (803) 656-3227

Small Business Association Form 1158. U.S. Government Printing Office, Division of Public Documents, Washington, DC 20402 (202) 783-3238

*Baumback, Clifford M. How to Organize and Operate a Small Business. Englewood Cliffs, NJ: Prentice-Hall, Inc.

**Small Business Reporter. Bank of America, Department 3120, P. O. Box 37000, San Francisco, CA 94137 (415) 622-2491

Karnoff, Bernard. Small Time Operator. Laytonville, CA: Bell Springs Publishing Company

Local Chamber of Commerce

*This material is located in the PACE office and can be checked out by teachers.

**A copy of this publication is located in APPENDIX C.

RESOURCES FOR INTRODUCTION TO TECHNOLOGIES

UNIT IX--STUDY SKILLS

*Knipe, Wayne. Better Grades Easier. Dallas, TX: Taylor Publishing Company

*Jensen, Eric. Student Success Secrets. New York, NY: Barron's Educational Series, Inc.

*Greene, Lawrence and Jones-Bamman, Leigh. GETTING SMARTER: Simple Strategies to Get Better Grades. Belmont, CA: David S. Lake Publishers

*Ohme, Herman. Learn How to Learn. Los Altos, CA: California Education Plan

**Guidance Associates. Study Skills: How to Manage Your Time. Mount Kisco, NY

*This material is located in the PACE office and can be checked out by teachers.

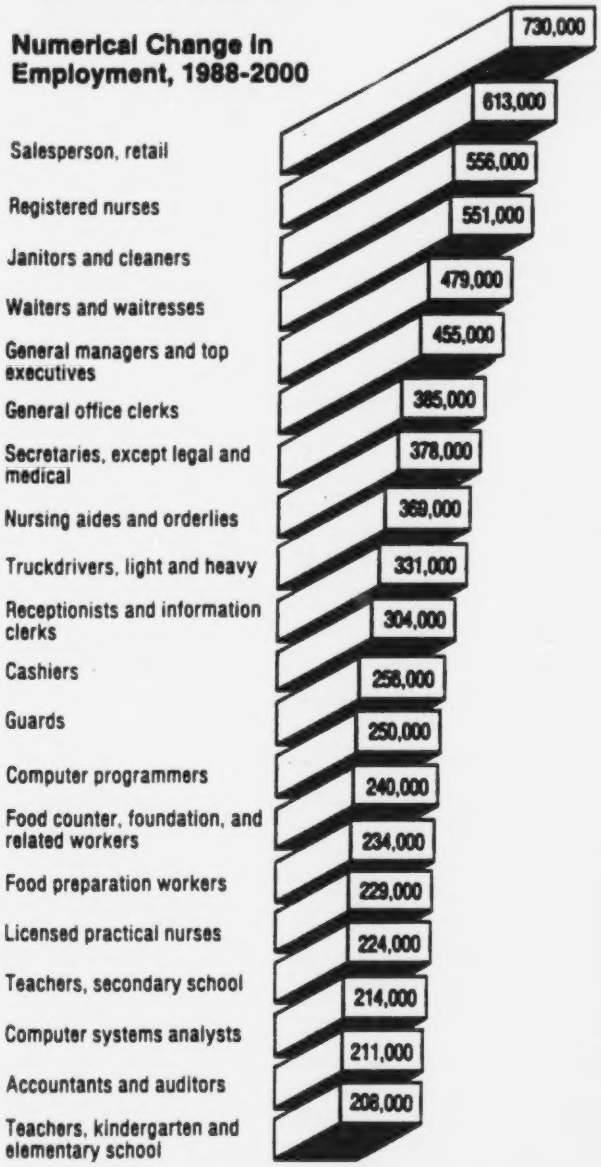
**This video is located in the Learning Resources Center on the campus of Tri-County Technical College and can be checked out by teachers.

UNIT I--THE CHANGING WORLD OF WORK

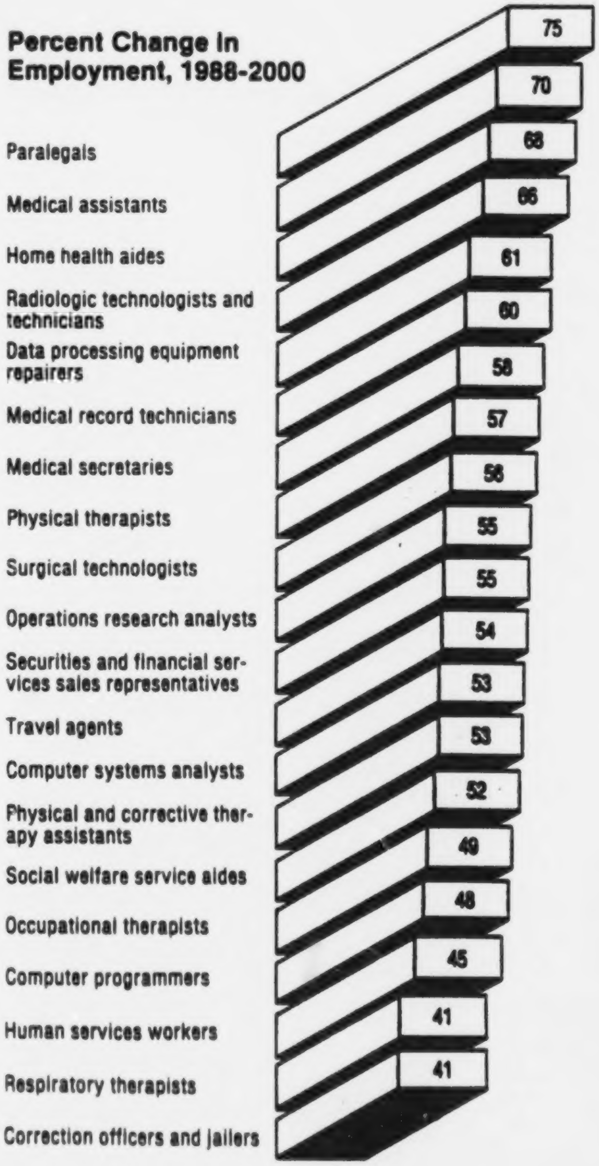
Growth in Occupations, 1988-2000

One of the factors to be considered in making career choices is the long-range outlook for occupations. Every two years, the Bureau of Labor Statistics studies occupations and estimates their growth in the future. This chart shows the 20 occupations which will offer the most jobs and the 20 which are expected to grow at the fastest rate up to the year 2000.

Careers should not be selected solely on the basis of long-range employment opportunities. But occupational outlook must be one of the factors considered in making career choices.



Numerical Change in Employment, 1988-2000



Percent Change in Employment, 1988-2000

Minichart prepared by the *Career Opportunities News*, PO Box 190, Garrett Park, MD 20896 and based upon data in the Occupational Outlook Quarterly, Fall 1989.

COPY AVAILABLE

LABORATORY TECHNICIAN

An excellent opportunity now exists for an individual possessing an Associates Degree in Science with Industrial Laboratory experience to become associated with an FDA regulated organization.

The successful candidate will have working knowledge of the metric system, strong math skills and awareness to details in a chemical laboratory. The operation of IR, UV, HPLC, GC, and pH meter instruments along with the ability to do gravimetric analysis are essential.

Interested candidates should submit resume to include salary history to:

Personnel Manager
Schmid Laboratories
P.O. Box 2337
Anderson, SC 29622
EOE

MECHANICAL DESIGN ENGINEER

GASTON COUNTY DYEING MACHINE COMPANY, a leader in wet process equipment and controllers for the Textile Industry has an immediate need for a Mechanical Design Engineer.

Candidates should possess a good knowledge of pressure vessel design and calculation, piping design, and experience with AUTOCAD. Candidate must be an innovative self-starter. An Associate Degree with a minimum of 5 years axperience or BSME with 2 plus years of experience is required.

GASTON COUNTY offers a pleasant work environment, excellent benefits package and salary commensurate with education and experience. For confidential consideration, send resume to:

D 32641-16

Director Employee Relations

Gaston County

GASTON COUNTY

GASTON COUNTY DYEING MACHINE COMPANY
P.O. Box 308, Stanley, NC 28164

An Equal Opportunity Employer

INDUSTRIAL HYGIENIST

Successful candidate will manage industrial hygiene program for a large electronics industry manufacturing facility with greater than 1000 employees. Responsibilities include:

Identification, evaluation and control of work place hazards; Compliance with State and Federal occupational safety and health regulations. Maintain monitoring and testing programs to insure a safe work environment.

Requires minimum BS Degree in Industrial Hygiene or related discipline plus certification by the American Board of Industrial Hygienists. Additional education in safety or environmental sciences and/or Masters Degree is desirable. Prefer 2 to 5 years Industrial Hygiene experience in chemical or related industry. Must have good communication skills and ability to effectively solve technical problems.

We offer excellent career opportunities including competitive salary and benefits.

Send resume with salary history in confidence to:

MEMC Electronic Materials, Inc.
Attn: Human Resources Employment
P.O. Box 5397
Spartanburg, S.C. 29304
An Equal Opportunity Employer M/F/H/V

MEMC

DIETICIAN II (Clinical)

A bachelor's degree in home economics, dietics, foods, nutrition or institution management and one year experience in institutional food service. Registered by A.D.A. Responsible for participating in multi-disciplinary team, nutrition assessment, develop implementing & monitoring nutrition care plans. Salary $20,345-$25,481.
Apply to Personnel:

SCDMR - Coastal Center
Jamison Road
Ladson, S.C. 29456
Walk-in applications accepted only on Monday & Wednesday.
EOE/AA employer

Clemson University Word Processing Supervisor

High school graduation and five years office work experience, one year of which must have been in word processing. Type at a corrected rate of 35 WPM. Prefer associate degree and three years word processing experience. Extensive knowledge of various word processing and related telecommunications software packages and hardware desired. Experience in training others is preferred. Position requires good communication and organizational skills. Salary: State Pay Grade 24 (Minimum $17,561). Closing Date: 11/30/90. Send letter of application and resume to:

Clemson University
Recruitment &
Employee Services
106 University
Square
Clemson, SC
29634-5337

Administration

TEST YOUR LIMITS IN THE INDUSTRY OF TOMORROW

Office Administrator/ Executive Assistant

Chem-Nuclear Laboratory Services, Inc. provides a range of environmental services and is experiencing dynamic growth. Join us today in our Greenville office, then relocate to our new facility in the Clemson Park by 1992.

Providing administrative and secretarial support to the General Manager and 3 Directors, you'll handle all confidential records and supervise 3 secretaries. You'll also serve as site Human Resources Coordinator with responsibilities expanding to include community relations activities.

We require a minimum of a 2-year degree in Secretarial Science or related education and 10+ years experience in large office administration operations with at least 3 years in a supervisory role. A proven track record in establishing efficient office systems is necessary. Knowledge of multiple computer/word processing systems and strong English grammar skills are a must.

As a subsidiary of Chemical Waste Management, we can offer outstanding growth potential and visibility, coupled with a competitive salary and benefits package. To apply, call or send your resume with salary requirements to: Georgene Gorrell, Senior Human Resources Representative, Dept. CNLS., P.O. Box 24000, Greenville, SC 29616. Equal Opportunity Employer.

CHEM-NUCLEAR
LABORATORY
SERVICES, INC.

SR. CAD OPERATOR

Highly motivated individual for non-smoking environment. Experienced in AutoCAD, sheetmetal, trigonometry, electrical diagrams, product development environment. Minimum 10 yrs exp. 3 yrs min. using AutoCad. Must know tablet customization and some AutoLISP. Hands on knowledge of sheet metal working and welding a plus.
Job entails being a member of a product development team, which will take new products from concept to production. Send resume to: BK INDUSTRIES, ATTN HARRY ZIMMERLY, PO Box 40, Mauldin, SC 29662.

COMPUTERLAND OF GREENWOOD

Due to our rapid increase in business throughout the upstate, ComputerLand of Greenwood, one of the SouthEast's largest volume IBM Advanced Products Dealers, is interviewing for a Service Technician for the Greenwood and surrounding areas. Individual should be highly motivated with excellent communication skills. Applicant must have an Associates Degree in Electronics or other related field or equivalent work experience. Previous work with IBM and compatible computer equipment a plus. Please send resume and salary history in confidence to:

Service Manager
ComputerLand of Greenwood
1219-E Montague Ave.
Greenwood, SC 29646

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COLLEGE GRADS

BACHELORS & ASSOCIATES DEGREES

SECURE YOUR FUTURE

The U.S. Navy currently has openings in advanced training programs for college graduates.

These special programs offer advanced promotion, increased pay and the world's best technical training.

Openings are available in the following career fields:

- Aviation
- Communications
- Electrical/Electronics
- Diving & Salvage
- Language
- Medical/Dental Technology
- Nuclear Power

If you qualify, we will guarantee you full pay while training, 30 days per year paid vacation and comprehensive medical/dental coverage. Qualified applicants must be between 17-34 years old (age restrictions may apply in certain fields) and in good physical condition.

To see if you qualify for this special program call toll-free in SC 1-800-922-2135; in GA 1-800-845-5640.

AS/400 PROGRAMMER ANALYST

A progressive textile manufacturing firm, headquartered in Greenville, SC, is seeking an experienced, AS/400 Programmer Analyst to fill a new position within the Information Systems Department. The firm has a history of making significant investments in advanced technology and developing business applications from scratch in a challenging environment of system creation opportunities from idea to implementation.

From the largest AS/400 to one of the smallest and several IBM System 38s in between, the firm utilizes a distributed data processing environment of peer-to-peer processor networks, distributed data management, network spooling, and a highly advanced telecommunications network. In addition, advanced programming tools are used extensively to enhance productivity including IBM PS/2s equipped with RPG/400, CL, and several software utilities for all system development staff members. The firm offers a highly competitive salary and comprehensive benefit package.

Candidates must have an undergraduate degree or equivalent with a major in management information systems, computer science, or business related field and approximately three years of AS/400 or System 38 manufacturing or financial applications development experience. In addition, candidates must possess a high level of interpersonal, oral and written communication skills.

For consideration, please forward your resume', including salary expectations, to:

Box S-H
Greenville News/Piedmont
P.O. Box 1688
Greenville, SC 29602

T11033-26

PAINT/POWDER SUPERVISOR

Position reports to the Paint/Powder Manager.
Requires 5-10 years progressive experience in high volume automatic electrostatic wet and powder coating manufacturing. Working knowledge of material procurement processes.
Directly responsible for supervision of production employees, production monitoring and reporting, and involvement in quality control procedures. Requires basic knowledge of personnel safety requirement s and practices. SPC knowledge a plus.
Good verbal, written and reporting skills are required, along with the ability to communicate with personnel at all levels, and be effective in a team environment.
Applicant should be PC literate and have working knowledge of MRP systems.
Company offers an excellent salary and full range of benefits. Qualified applicants should send current resume with salary history to: (No phone calls please)

Human Resource Manager
PROGRESS LIGHTING
P.O. Box 989
Cowpens, SC 29330
EEO M/F

OCONEE MEMORIAL HOSPITAL ANNOUNCES:

The Weekend Plan in Critical Care

Openings are now available in our progressive Critical Care unit for Nurses to work two 12 hour shifts each weekend while receiving 36 hours of pay and a competitive fulltime benefit package with excellent salaries.
For more information on this plan or other alternative scheduling options including PRN POOL, Please contact:
Jeanne Ward, Vice President for Patient Care Services
803-882-3351 ext. 171.

ASST. DIRECTOR OF NURSING

If you want professional growth, a real challenge and recognition for your efforts, you will find it at Hillhaven Health Care. This 129 bed, long term care facility is looking for a dynamic, professional, patient care oriented RN to join our team. The ideal candidate will be licensed as an RN in S.C. with 3-5 years nursing experience. Good management techniques and organizational skills are a must. $14+/hr. depending experience and or education. We offer competitive benefit package, medical and dental insurance, stock option, credit union and retirement plan. To apply at:

Jean Casey
Director of Nursing
Hillhaven Health Care
411 Angel St.
232-5368
EOE

Athens Homeless Shelter Director

Degree in Social Work, Personnel Management, or related fields preferred; previous experience considered in lieu of degree.

Looking for "people person" with strong organizational/administrative skills. Supervise staff of three to five people. Serving twenty guests daily. Salary range $18,000 to $21,000. EOE.

Send resume to: Shelter Director, P. O. Box 6852, Athens, Ga. 30604, by October 22, 1990. Positions begins December, 1990.

ACCEPTING APPLICATIONS

Pickens County is seeking applications for a Criminal Investigator for the 13th Circuit Solicitor's Office. Requirements: Graduate from a two year college and a minimum of two years experience in law enforcement; thorough knowledge of criminal law and a general understanding of civil law; must possess a valid South Carolina Drivers license. This is a full time position with benefits.

Salary Range $22,084-$38,811

Applications are available through the Pickens County Administrator's Office, P.O. Box 275, Pickens, S.C. 29671.

Pickens County is an Equal Employment Opportunity Employer.

POSITION TITLE: UTILITIES CLERK

Basic functions: responsible for collection of water, sewer, sanitation and miscellaneous fees and charges. Interaction with the Office of Finance in reconciling water, sewer and sanitation subsidiary ledgers to general ledger. Required training and experience: high school diploma and two years clerical experience. Working knowlàdge of automated systems and calculators. Typing skill of 40 wpm. Desired skills and abilities: prefer an associate degree from a technical college or two institute. A working knowledge of minicipal utility billing procedures. Ability to communicate and maintain a harmonious relatinship with the public. Grade and salary range: professional attitude and appearance. Grade 9, Salary range $14,089-20,147. How and when to apply: Application accepted at City Hall,

8:00-5:00 pm through January 5, 1991. The City of Clemson is an equal opportunity/affirmative action employer M/F.

ALCOHOL & DRUG ABUSE & COMMISSION COUNSELOR III

Starting Salary, $22,414

Provides individual and group addiction therapy to individuals and families with alcohol and other drug related problems. Requires Master's degree in social sciences with 2 years experience in a counseling program for alcohol and drug rehab. Applications accepted thru November 21, 1990.
Apply at:

SPARTANBURG COUNTY PERSONNEL
366 N. Church St., Spartanburg, S.C. 29304. EOE M/F

MICROWAVE FIELD TECHNICIAN

This position will be primarily responsible for the maintenance of local Columbia area fiber systems and microwave systems statewide. Duties will include the installation, testing and maintenance of fiber optic transmission equipment and microwave equipment. A two year technical degree in Electronic Engineering or equivalent military training and three (3) years of experience in the installation and maintenance of complex telecommunications equipment, including telephone, radio and microwave systems. Prefer applicants with microwave, fiber class Radiotelephone license or higher; or a Certified Technician w/certificate from a nationally recognized organization. SALARY RANGE: $24,825-$36,852. Send resume to: Attention Personnel, P.O. Box 12444, Columbia, SC 29211.

EQUAL OPPORTUNITY EMPLOYER

(February 1991)

BEST COPY AVAILABLE

Two-year college graduates are in demand!!! Many careers are available, salaries are good, job responsibilities are varied, and advancement opportunities are plentiful...

COMPUTER PROGRAMMER I

Office of S.C. Comptroller General has immediate opening for entry level computer programmer. Must have working knowledge of COBOL. Database training is a plus. Requires associate or B.S. degree in computer science or related major. Grade 26, Salary $18,177. Reply to:

S.C. Comptroller General
Personnel Office
P.O. Box 11228
Columbia, S.C. 29211
E.O.E.

A12803020

CLEMSON UNIVERSITY HISTOLOGY TECHNOLOGIST

Qualifications: High School Graduation and two (2) years experience as a Histology Technician, or an associate degree in Histology (preferred) and (8) months experience in Histologic Techniques. Supervisory experience is preferred. Experience with processing plastics would be helpful. Salary: State Pay Grade 26 ($18,177-$27,265) with benefits package. Closing Date: December 1, 1989. Apply directly or send a letter of application and resume to: Clemson University, Personnel Services Division, 106 University Square, Clemson, South Carolina, 29634-5337. An Affirmative Action/Equal Opportunity Employer.

LIEUTENANT UNIFORM PATROL DIV.

(3rd Shift)

Starting salary, $26,497

Directs & supervises the activities of officers as assigned. Requires college degree in Criminal Justice w/2 years of experience in law enforcement, 1 yr. at the supervisory capacity or an Associate's Degree in Criminal Justice w/3 yrs. of law enforcement experience, 1 yr. at the supervisory capacity or a high school graduate w/4 yrs. of law enforcement experience w/2 yrs. at the supervisory level. Must be a Certified Officer w/completion of SC Criminal Justice Academy.

Staff Nurse

Number Of Positions: 1
Vacancy Number: 4092
Location: Perry Correctional Institution
Pelzer, South Carolina 29669
Grade: 30
Salary: $21,262 - $31,894
Deadline For Applying: Open until filled
Minimum Qualifications: Licensed as a registered Nurse by the South Carolina Board Of Nursing.
Day Shift with shift rotation and weekends as needed.

Interested persons may send a resume (SS number & vacancy number must be included in order for resume to be processed), or apply in person at the:

S. C. DEPARTMENT OF CORRECTIONS
Recruiting & Employment Services Branch
4330 Broad River Street
Columbia, SC 29210

M/F EOE

MACHINE SHOP SUPERVISOR

Local, coastal & TN openings. Prefer 3+ yrs. precision machine shop supervisory exp. CNC, MRP, JIT & AS degree a plus! $29-$34K. Contact Ron Phelps. 232-8139.

PHELPS PERSONNEL
Box 4177 Greenville, SC 29608

($29,000 - $34,000)

PERSONNEL ANALYST RECRUITMENT

Associate Degree and one year experience in personnel, business, or related field; or an equivalent combination of education and experience. Previous experience in recruitment and screening of applicants a plus. Salary $20,891

Apply: 10 AM - 4 PM, Mon-Fri.
G'ville County Personnel Dept.
301 University Ridge
Suite 500, County Square
Greenville, SC 29601
EEO/AA Employer

DRAFTER/DETAILER

AS in drafting technology, some detailing & assembly drafting of mechanical equipment. To $20K. Fee pd. Call Jean Irby, 232-8226. MANTEC, 226-D Lowndes Hill Rd., G'ville, SC 29607.

(to $20,000)

MANUFACTURING ENGINEERING SECRETARY

Square D Company, an international leader in the electrical/electronics industry, has an opening for a Manufacturing Engineering Secretary.

Responsibilities will include executing secretarial duties for the Manufacturing Engineering Department. Must be organized, highly motivated individual. Two year Secretarial Science Degree preferred. Strong Personal Computer skills, including word processing, Lotus, Dbase II required. Must be able to type 65 WPM and have at least two years related work experience.

For consideration, send resume to:

Human Resources

SQUARE D COMPANY
1990 Sandifer Blvd.
Seneca, SC 29678

EEO
M/F/H/V

HVAC Technician

Qualifications: 4 years experience with all types HVAC equipment. High School Graduate and additional training preferred. Contract-12 Months, 8 hours per day. Salary range $9.49-$10.06 per hour. Apply: Letter of Interest & Resume must be received by 4pm December 8. Personnel Office, Greenwood School District 50, PO Box 248, Greenwood, SC 29648
EOE

($19,939 - $20,924)

CLEMSON UNIVERSITY Network Services Technician I

Qualifications: An associate degree and one year of experience in local area network (LAN) communications (preferably in the Novell environment); or equivalent trade school or military training and experience. General operating system experience with MS-DOS is desired. Salary: State Pay Grade 29 (minimum $20,843) with benefits. Closing Date: February 16, 1990. Send a letter of application and resume or apply directly to: Clemson University, Personnel Services Division, 106 University Square, Clemson, SC 29634-5337. Clemson University is an Affirmative Action/Equal Opportunity Employer.

NC PROGRAMMER

New plant. Need AS engineering degree & 3+ yrs. manual or computer assisted programming exp. $29-$35K. Contact Ron Phelps. 232-8139.

PHELPS PERSONNEL
Box 4177 Greenville, SC 29608

(A.S. = Associate in Science; $29,000 - $35,000)

FOOD SERVICE SUPERVISOR III

One position vacancy #4153
Dutchman Correctional Institution, Enoree, SC
Grade 23 Salary $16,156-24,235
Deadline for applying
Open until filled

MINIMUM QUALIFICATIONS: An associate degree in food service management or dietetics and two years experience in quantity and quality cooking, including one year in a supervisory capacity, or high school graduation and four years experience in quantity and quality cooking, including one year in a supervisory capacity.

Interested persons may send a resume to:
S.C. DEPT OF CORRECTIONS
Recruiting & Employment
Services Branch
4330 Broad River Rd
Columbia SC 29210

(SS # & Vacancy Number must be included in order for resume to be processed.) EOE M/F

LINE TECHNICIAN

Must be able to work on all types of automobiles. If you are not happy with your present earnings and benefits, come by today. Earn $25,000 to $30,000 per year with paid vacations, holidays, full life and medical insurance. We have continuous on-the-job training as well as in our Technical Center in Jacksonville Florida.

See Dick Highlander
TOYOTA OF EASLEY

N17301

Source: Anderson Independent-Mail, Greenville News, Clemson Messenger, Seneca Journal/Tribune, and The State newspapers

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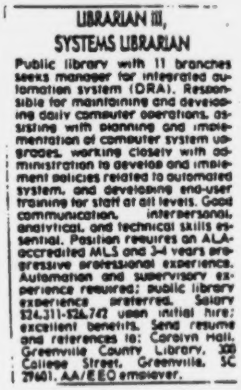
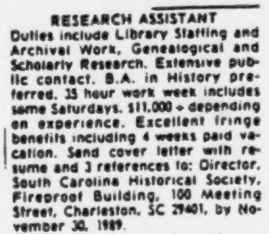
Did you know that having a bachelor's degree doesn't necessarily mean you'll earn more money than someone who graduates from a two-year college?



LIBRARIAN III, SYSTEMS LIBRARIAN

Public library with 11 branches seeks manager for integrated automation system (DRA). Responsible for maintaining and developing daily computer operations, assisting with planning and implementation of computer system upgrades, working closely with administration to develop and implement policies related to automated system, and developing end-user training for staff at all levels. Good communication, interpersonal, analytical, and technical skills essential. Position requires an ALA-accredited MLS and 3-4 years progressive professional experience. Automation and supervisory experience required; public library experience preferred. Salary $24,311-$26,742 upon initial hire; excellent benefits. Send resume and references to: Carolyn Hall, Greenville County Library, 300 College Street, Greenville, SC 29601. AA/EEO employer.

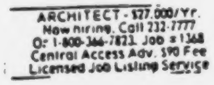
(MLS = Master's degree in Library Science)



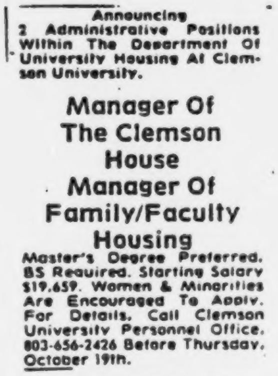
RESEARCH ASSISTANT

Duties include Library Staffing and Archival Work, Genealogical and Scholarly Research. Extensive public contact. B.A. in History preferred. 35 hour work week includes some Saturdays. $11,000 + depending on experience. Excellent fringe benefits including 4 weeks paid vacation. Send cover letter with resume and 3 references to: Director, South Carolina Historical Society, Fireproof Building, 100 Meeting Street, Charleston, SC 29401, by November 30, 1989.

(B.A. = Bachelor of Arts)



ARCHITECT - $27,000/Yr.
Now hiring. Call 232-7777
Or 1-800-366-7821. Job # 1368
Central Access Adv. $90 Fee
Licensed Job Listing Service

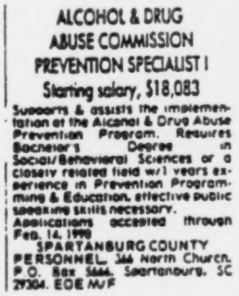


Announcing
2 Administrative Positions Within The Department Of University Housing At Clemson University.

Manager Of The Clemson House
Manager Of Family/Faculty Housing

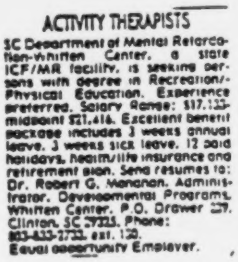
Master's Degree Preferred. BS Required. Starting Salary $19,659. Women & Minorities Are Encouraged To Apply. For Details, Call Clemson University Personnel Office, 803-656-2426 Before Thursday, October 19th.

(B.S. = Bachelor of Science)



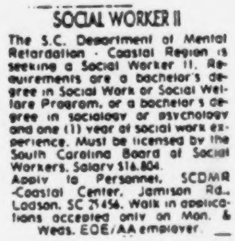
ALCOHOL & DRUG ABUSE COMMISSION PREVENTION SPECIALIST I
Starting salary, $18,083

Supports & assists the implementation of the Alcohol & Drug Abuse Prevention Program. Requires Bachelor's Degree in Social/Behavioral Sciences or a closely related field w/1 years experience in Prevention Programming & Education, effective public speaking skills necessary.
Applications accepted through Feb. 14, 1990
SPARTANBURG COUNTY PERSONNEL, 366 North Church, P.O. Box 5666, Spartanburg, SC 29304. EOE M/F



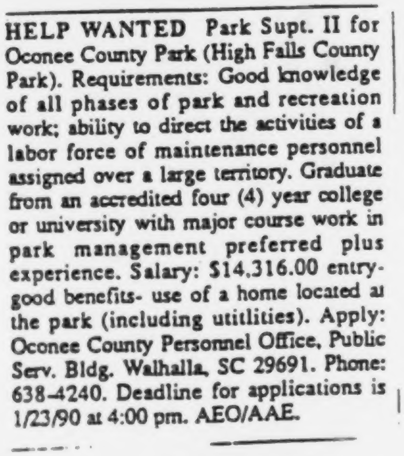
ACTIVITY THERAPISTS

SC Department of Mental Retardation-Whitten Center, a state ICF/MR facility, is seeking persons with degree in Recreation/Physical Education. Experience preferred. Salary Range: $17,123-midpoint $21,416. Excellent benefit package includes 3 weeks annual leave, 3 weeks sick leave, 12 paid holidays, health/life insurance and retirement plan. Send resumes to: Dr. Robert G. Manahan, Administrator, Developmental Programs, Whitten Center, P.O. Drawer 239, Clinton, SC 29325. Phone: 803-833-2733, ext. 120.
Equal opportunity Employer.

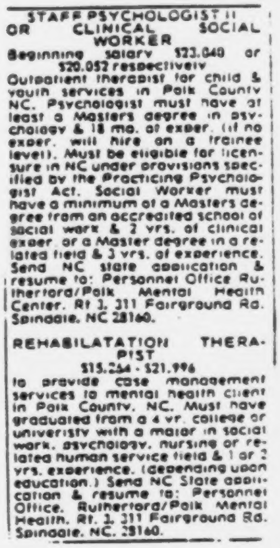


SOCIAL WORKER II

The S.C. Department of Mental Retardation - Coastal Region is seeking a Social Worker II. Requirements are a bachelor's degree in Social Work or Social Welfare Program, or a bachelor's degree in sociology or psychology and one (1) year of social work experience. Must be licensed by the South Carolina Board of Social Workers. Salary $16,804.
Apply to Personnel, SCDMR -Coastal Center, Jamison Rd., Ladson, SC 29456. Walk in applications accepted only on Mon. & Weds. EOE/AA employer.



HELP WANTED Park Supt. II for Oconee County Park (High Falls County Park). Requirements: Good knowledge of all phases of park and recreation work; ability to direct the activities of a labor force of maintenance personnel assigned over a large territory. Graduate from an accredited four (4) year college or university with major course work in park management preferred plus experience. Salary: $14,316.00 entry-good benefits- use of a home located at the park (including utitlities). Apply: Oconee County Personnel Office, Public Serv. Bldg. Walhalla, SC 29691. Phone: 638-4240. Deadline for applications is 1/23/90 at 4:00 pm. AEO/AAE.

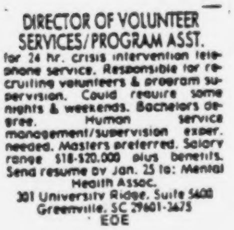


STAFF PSYCHOLOGIST II OR CLINICAL SOCIAL WORKER

Beginning salary $23,040 or $20,052 respectively
Outpatient therapist for child & youth services in Polk County NC. Psychologist must have at least a Masters degree in psychology & 18 mo. of exper. (if no exper. will hire on a trainee level). Must be eligible for licensure in NC under provisions specified by the Practicing Psychologist Act. Social Worker must have a minimum of a Masters degree from an accredited school of social work & 2 yrs. of clinical exper. or a Master degree in a related field & 3 yrs. of experience. Send NC state application & resume to: Personnel Office Rutherford/Polk Mental Health Center, Rt 1, 311 Fairground Rd. Spindale, NC 28160.

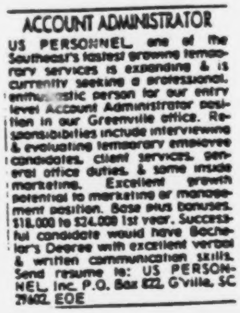
REHABILATATION THERAPIST
$15,264 - $21,996

to provide case management services to mental health client in Polk County, NC. Must have graduated from a 4 yr. college or univeristy with a major in social work, psychology, nursing or related human service field & 1 or 2 yrs. experience. (depending upon education.) Send NC State application & resume to: Personnel Office, Rutherford/Polk Mental Health, Rt. 1, 311 Fairground Rd. Spindale, NC. 28160.



DIRECTOR OF VOLUNTEER SERVICES/PROGRAM ASST.

for 24 hr. crisis intervention telephone service. Responsible for recruiting volunteers & program supervision. Could require some nights & weekends. Bachelors degree. Human service management/supervision exper. needed. Masters preferred. Salary range $18-$20,000 plus benefits. Send resume by Jan. 25 to: Mental Health Assoc.
301 University Ridge, Suite 5400
Greenville, SC 29601-3675
EOE



ACCOUNT ADMINISTRATOR

US PERSONNEL, one of the Southeast's fastest growing temporary services is expanding & is currently seeking a professional, enthusiastic person for our entry level Account Administrator position in our Greenville office. Responsibilities include interviewing & evaluating temporary employee candidates, client services, general office duties, & some inside marketing. Excellent growth potential to marketing or management position. Base plus bonuses. $18,000 to $24,000 1st year. Successful candidate would have Bachelor's Degree with excellent verbal & written communication skills. Send resume to: US PERSONNEL, Inc. P.O. Box 822, G'ville, SC 29602. EOE

(Source: Anderson Independent-Mail, Greenville News, Clemson Messenger, Seneca Journal/Tribune, and The State newspapers — 1989, 1990)

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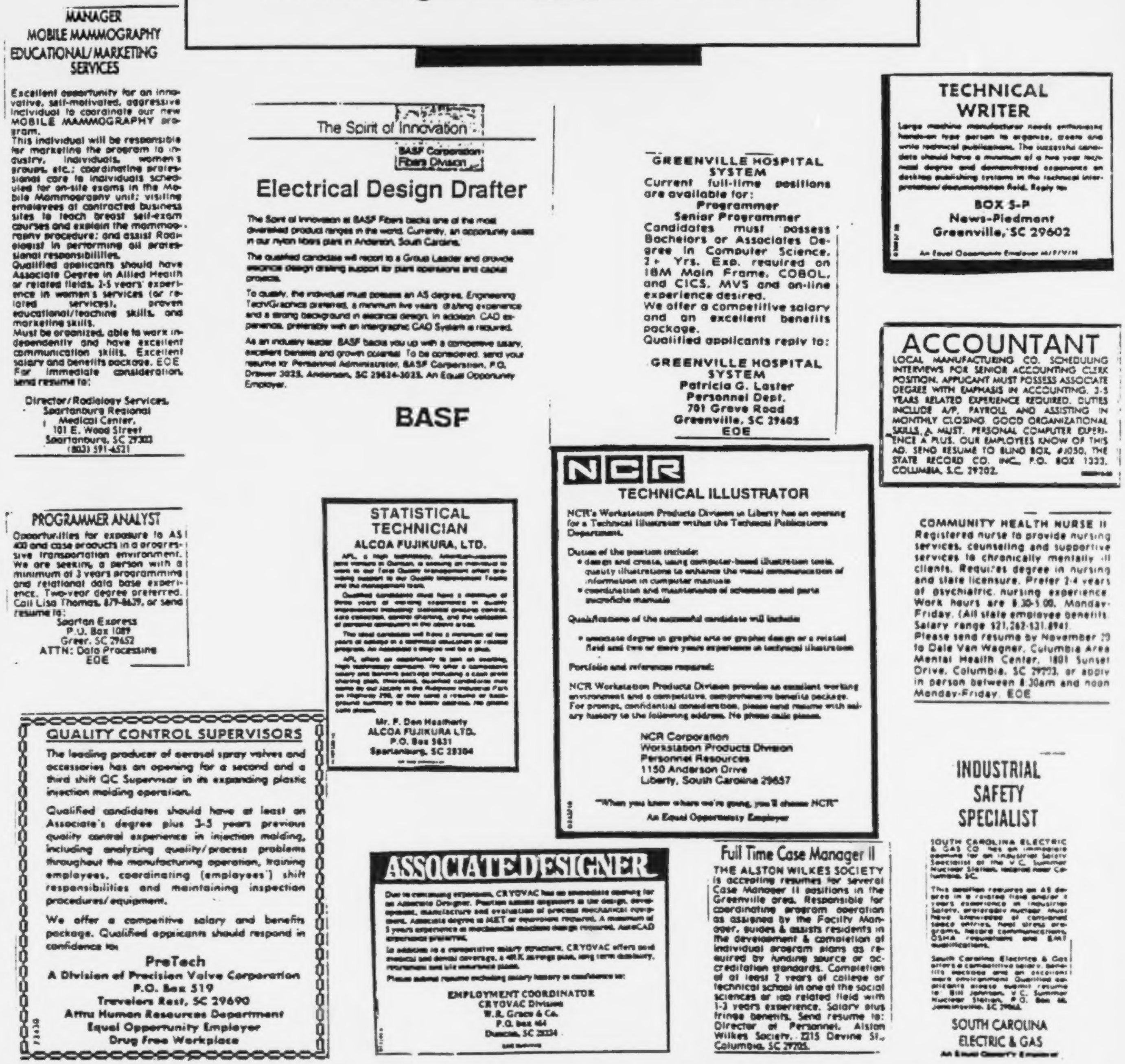
Tech Prep + two-year college degree = responsible career positions, interesting work and advancement!



MANAGER MOBILE MAMMOGRAPHY EDUCATIONAL/MARKETING SERVICES

Excellent opportunity for an innovative, self-motivated, aggressive individual to coordinate our new MOBILE MAMMOGRAPHY program.

This individual will be responsible for marketing the program to industry, individuals, women's groups, etc.; coordinating professional care to individuals scheduled for on-site exams in the Mobile Mammography unit; visiting employees at contracted business sites to teach breast self-exam courses and explain the mammography procedure; and assist Radiologist in performing all professional responsibilities.

Qualified applicants should have Associate Degree in Allied Health or related fields, 2-5 years' experience in women's services (or related services), proven educational/teaching skills, and marketing skills.

Must be organized, able to work independently and have excellent communication skills. Excellent salary and benefits package. EOE For immediate consideration, send resume to:

Director/Radiology Services,
Spartanburg Regional
Medical Center,
101 E. Wood Street
Spartanburg, SC 29303
(803) 591-6521

The Spirit of Innovation

BASF Corporation
Fibers Division

Electrical Design Drafter

The Spirit of Innovation at BASF Fibers backs one of the most diversified product ranges in the world. Currently, an opportunity exists in our nylon fibers plant in Anderson, South Carolina.

The qualified candidate will report to a Group Leader and provide electrical design drafting support for plant operations and capital projects.

To qualify, the individual must possess an AS degree, Engineering Tech/Graphics preferred, a minimum five years drafting experience and a strong background in electrical design. In addition, CAD experience, preferably with an Intergraphic CAD System is required.

As an industry leader, BASF backs you up with a competitive salary, excellent benefits and growth potential. To be considered, send your resume to: Personnel Administrator, BASF Corporation, P.O. Drawer 3025, Anderson, SC 29624-3025. An Equal Opportunity Employer.

BASF

GREENVILLE HOSPITAL SYSTEM

Current full-time positions are available for:

Programmer
Senior Programmer

Candidates must possess Bachelors or Associates Degree in Computer Science, 2+ Yrs. Exp. required on IBM Main Frame, COBOL, and CICS. MVS and on-line experience desired.

We offer a competitive salary and an excellent benefits package.

Qualified applicants reply to:

GREENVILLE HOSPITAL SYSTEM
Patricia G. Laster
Personnel Dept.
701 Grove Road
Greenville, SC 29605
EOE

TECHNICAL WRITER

Large machine manufacturer needs enthusiastic hands-on type person to organize, create and write technical publications. The successful candidate should have a minimum of a two year technical degree and demonstrated experience on desktop publishing systems in the technical interpretation/documentation field. Reply to:

BOX 5-P
News-Piedmont
Greenville, SC 29602

An Equal Opportunity Employer M/F/V/H

ACCOUNTANT

LOCAL MANUFACTURING CO. SCHEDULING INTERVIEWS FOR SENIOR ACCOUNTING CLERK POSITION. APPLICANT MUST POSSESS ASSOCIATE DEGREE WITH EMPHASIS IN ACCOUNTING. 3-5 YEARS RELATED EXPERIENCE REQUIRED. DUTIES INCLUDE A/P, PAYROLL AND ASSISTING IN MONTHLY CLOSING. GOOD ORGANIZATIONAL SKILLS A MUST. PERSONAL COMPUTER EXPERIENCE A PLUS. OUR EMPLOYEES KNOW OF THIS AD. SEND RESUME TO BLIND BOX #J050, THE STATE RECORD CO. INC., P.O. BOX 1333, COLUMBIA, S.C. 29202.

PROGRAMMER ANALYST

Opportunities for exposure to AS 400 and case products in a progressive transportation environment. We are seeking a person with a minimum of 3 years programming and relational data base experience. Two-year degree preferred. Call Lisa Thomas, 879-8639, or send resume to:

Spartan Express
P.O. Box 1089
Greer, SC 29652
ATTN: Data Processing
EOE

STATISTICAL TECHNICIAN
ALCOA FUJIKURA, LTD.

AFL, a high technology, American-Japanese joint venture in Duncan, is seeking an individual to work in our Total Quality Management effort providing support to our Quality Improvement Teams and the management team.

Qualified candidates must have a minimum of three years of working experience in quality improvement including: statistical process control, data collection, control charting, and the utilization of personal computers in the above areas.

The ideal candidate will have a minimum of two years of college in a technical education or related program. An Associate's degree will be a plus.

AFL offers an opportunity to join an exciting, high technology company. We offer a competitive salary and benefits package including a cash profit sharing plan. Interested, qualified candidates may apply at our facility in the Ridgeview Industrial Park on Highway 290, or may send a resume or background summary to the below address. No phone calls please.

Mr. P. Don Heatherly
ALCOA FUJIKURA LTD.
P.O. Box 5831
Spartanburg, SC 29304

An equal opportunity employer

NCR

TECHNICAL ILLUSTRATOR

NCR's Workstation Products Division in Liberty has an opening for a Technical Illustrator within the Technical Publications Department.

Duties of the position include:

- design and create, using computer-based illustration tools, quality illustrations to enhance the visual communication of information in computer manuals
- coordination and maintenance of schematics and parts microfiche manuals

Qualifications of the successful candidate will include:

- associate degree in graphic arts or graphic design or a related field and two or more years experience in technical illustration

Portfolio and references required.

NCR Workstation Products Division provides an excellent working environment and a competitive, comprehensive benefits package. For prompt, confidential consideration, please send resume with salary history to the following address. No phone calls please.

NCR Corporation
Workstation Products Division
Personnel Resources
1150 Anderson Drive
Liberty, South Carolina 29657

"When you know where we're going, you'll choose NCR"

An Equal Opportunity Employer

COMMUNITY HEALTH NURSE II

Registered nurse to provide nursing services, counseling and supportive services to chronically mentally ill clients. Requires degree in nursing and state licensure. Prefer 2-4 years of psychiatric nursing experience. Work hours are 8:30-5:00, Monday-Friday. (All state employee benefits. Salary range $21,262-$31,894).

Please send resume by November 29 to Dale Van Wagner, Columbia Area Mental Health Center, 1801 Sunset Drive, Columbia, SC 29203, or apply in person between 8:30am and noon Monday-Friday. EOE

QUALITY CONTROL SUPERVISORS

The leading producer of aerosol spray valves and accessories has an opening for a second and a third shift QC Supervisor in its expanding plastic injection molding operation.

Qualified candidates should have at least an Associate's degree plus 3-5 years previous quality control experience in injection molding, including analyzing quality/process problems throughout the manufacturing operation, training employees, coordinating (employees') shift responsibilities and maintaining inspection procedures/equipment.

We offer a competitive salary and benefits package. Qualified applicants should respond in confidence to:

PreTech
A Division of Precision Valve Corporation
P.O. Box 519
Travelers Rest, SC 29690
Attn: Human Resources Department
Equal Opportunity Employer
Drug Free Workplace

ASSOCIATE DESIGNER

Due to continuing expansion, CRYOVAC has an immediate opening for an Associate Designer. Position assists engineers in the design, development, manufacture and evaluation of precision mechanical equipment. Associate degree in MET or equivalent required. A minimum of 5 years experience in mechanical machine design required. AutoCAD experience preferred.

In addition to a competitive salary structure, CRYOVAC offers good medical and dental coverage, a 401K savings plan, long term disability, retirement and life insurance plans.

Please submit resume including salary history in confidence to:

EMPLOYMENT COORDINATOR
CRYOVAC Division
W.R. Grace & Co.
P.O. Box 464
Duncan, SC 29334

[illegible]

Full Time Case Manager II

THE ALSTON WILKES SOCIETY is accepting resumes for several Case Manager II positions in the Greenville area. Responsible for coordinating program operation as assigned by the Facility Manager, guides & assists residents in the development & completion of individual program plans as required by funding source or accreditation standards. Completion of at least 2 years of college or technical school in one of the social sciences or job related field with 1-3 years experience. Salary plus fringe benefits. Send resume to: Director of Personnel, Alston Wilkes Society, 2215 Devine St., Columbia, SC 29205.

INDUSTRIAL SAFETY SPECIALIST

SOUTH CAROLINA ELECTRIC & GAS CO. has an immediate opening for an Industrial Safety Specialist at the V.C. Summer Nuclear Station, located near Columbia, SC.

This position requires an AS degree in a related field and/or 4 years experience in Industrial Safety, preferably nuclear. Must have knowledge of confined space entries, heat stress programs, hazard communications, OSHA regulations and EMT qualifications.

South Carolina Electric & Gas offers a competitive salary, benefits package and an excellent work environment. Qualified applicants please submit resume to: Bill Johnson, V.C. Summer Nuclear Station, P.O. Box 88, Jenkinsville, SC 29065.

SOUTH CAROLINA
ELECTRIC & GAS

An Equal Opportunity Employer

(Source: Anderson Independent-Mail, Greenville News, Clemson Messenger, Seneca Journal/Tribune, and The State newspapers — 1989, 1990)

BEST COPY AVAILABLE

Square D company, an international leader in the Electrical/Electronic Industry, has the following career opportunity.

PRODUCT SPECIALIST

Responsibilities include order entry for manufacture of Motor Control Centers through the use of computer systems and/or reference manuals, will develop bills of material and drawings for equipment to be assembled, selecting correct components, parts and assemblies. May prepare CAD developed or manual drawings for shop use in making or modifying a part for equipment assemblies, as well as prepare drawings for customer's approval when necessary.

Two year associate degree in Industrial Electronics Technology or Electrical/Electronic Engineering Technology. Must have basic knowledge of electrical/electronic equipment with ability to read wiring diagrams. Basic knowledge of computers and data processing equipment a must.

Qualified individuals should submit resume to Human Resources, SQUARE D COMPANY, 1990 Highway 123 West, Seneca, SC 29678. An Equal Opportunity Employer M/F/H.

SQUARE D COMPANY

Dedicated to Growth • Committed to Quality

WHNS-TV 21 is looking for a creative person for the position of TV/Film Editor to work in our Greenville studio. Candidate should have some film or video tape editing experience. Computer skills are helpful. Apply in person (no phone calls please) 8:30 A.M. - 5:30 P.M. at WHNS-TV 21, 21 Interstate Court, Greenville, S.C. 29615. EOE M/F/H

GREENVILLE HOSPITAL SYSTEM

Current full-time positions are available for:

Programmer

Senior Programmer

Candidates must possess Bachelors or Associates Degree in Computer Science. 2+ Yrs. Exp. required on IBM Main Frame, COBOL, and CICS. MVS and on-line experience desired.
We offer a competitive salary and an excellent benefits package.
Qualified applicants reply to:

GREENVILLE HOSPITAL SYSTEM
Patricia G. Lester
Personnel Dept.
701 Grove Road
Greenville, SC 29605
EOE

FOOD SERVICE SUPERVISOR III

One position, Vacancy #4095
McCormick Correctional
Institution, McCormick, SC 29835
Grade 23, Salary $16,156-24,235
Deadline for applying: 9-15-89

MINIMUM Qualifications: An associate degree in food service management or dietetics and two years experience in quantity & quality cooking, including one year in a supervisory capacity; or high school graduation and four years experience in quantity & quality cooking, including one year in a supervisory capacity.

Interested persons may send a resume to:

S.C. DEPT. OF CORRECTIONS
Recruiting & Employment
Services Branch
4400 Broad River Rd.
Columbia SC 29210

(SS# & Vacancy Number must be included in order for resume to be processed.) EOE M/F

TV ENGINEERING TECHNICIAN II

WRET-SPARTANBURG, SC

WRET-TV is seeking an individual for installation, repair, maintenance, modification and operation of electronic equipment used in producing, taping and transmitting television and/or radio programs. College degree in electronics or graduate of a technical education school in electronics with at least two years experience in electronic equipment maintenance. The salary range is $21,262-$31,894 depending on experience. For application, please send request to SCETV Personnel, 2712 Millwood Avenue, Columbia, SC 29250. EOE

STERILE PROCESSING TECHNICIAN

Anderson Memorial Hospital is seeking a STERILE PROCESSING TECHNICIAN to fill a full time position. Prefer experienced surgical technician and or knowledge of surgical instrumentation. We offer a competitive salary and benefits package. For more information, please contact:

Linda Brown
Anderson Memorial Hospital
800 N. Fant St.
Anderson, SC 29621
803-261-1162

FIRE/SAFETY MARSHAL

Position available for experienced person with 2 year degree in Fire/Safety or equivalent experience. Must be knowledgeable in techniques of fire prevention and inspection, and in federal, state and local regulations pertaining to OSHA, Right-To-Know, SARA, HEW and JCAHO. Healthcare safety background essential. Salary commensurate with experience, excellent benefits. Send resume to:

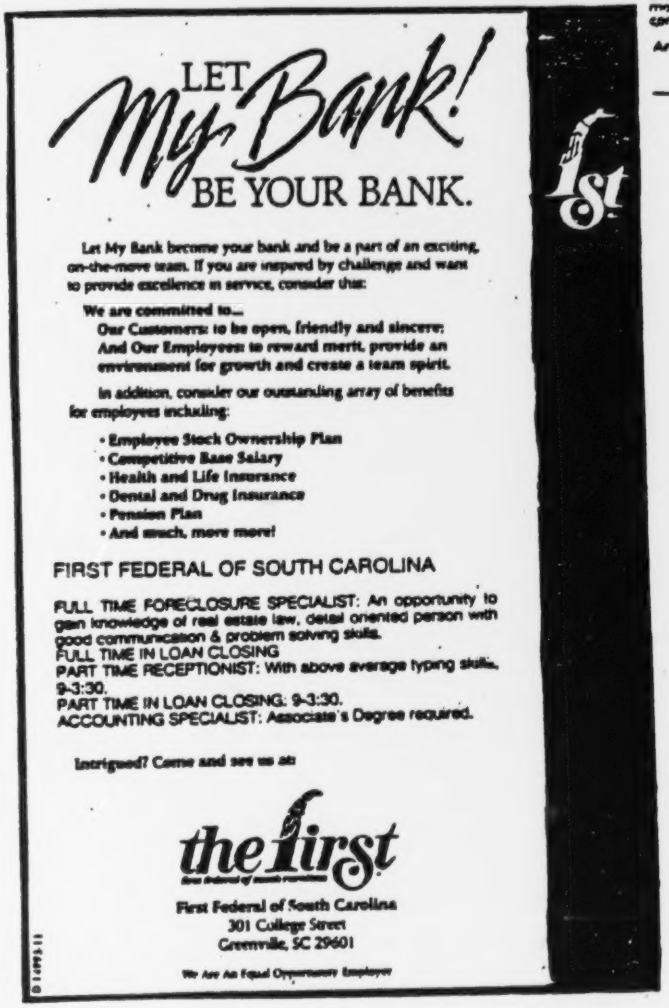
Letha Huffman
NORTH CAROLINA
BAPTIST HOSPITAL

300 S. Hawthorne Road
Winston-Salem, NC 27103

EOE

CLEMSON UNIVERSITY INSTRUCTIONAL MEDIA SPECIALIST

Permanent, full-time position in the Media Resource Center of the Clemson University College of Nursing.
Qualifications: Associate degree and one year experience in a Media Center. Ability to operate, maintain, and make minor repairs on all types of audiovisual equipment. Ability to work with IBM computers and some familiarity with software packages such as Wordstar and dBase III. Good communication skills necessary to work with students, faculty and staff.
Salary: State pay grade 22 ($15,520-$23,302*) with benefits package.
Closing date: August 28, 1989
Send a letter of application and resume or apply directly to:
CLEMSON UNIVERSITY
Personnel Services Division
106 University Square
Clemson, SC 29634-5337
An Affirmative Action/Equal Opportunity Employer



LET *My Bank!* BE YOUR BANK.

Let My Bank become your bank and be a part of an exciting, on-the-move team. If you are inspired by challenge and want to provide excellence in service, consider this:

We are committed to...

Our Customers: to be open, friendly and sincere;
And Our Employees: to reward merit, provide an environment for growth and create a team spirit.

In addition, consider our outstanding array of benefits for employees including:

- **Employee Stock Ownership Plan**
- **Competitive Base Salary**
- **Health and Life Insurance**
- **Dental and Drug Insurance**
- **Pension Plan**
- **And much, more more!**

FIRST FEDERAL OF SOUTH CAROLINA

FULL TIME FORECLOSURE SPECIALIST: An opportunity to gain knowledge of real estate law, detail oriented person with good communication & problem solving skills.
FULL TIME IN LOAN CLOSING
PART TIME RECEPTIONIST: With above average typing skills. 9-3:30.
PART TIME IN LOAN CLOSING: 9-3:30.
ACCOUNTING SPECIALIST: Associate's Degree required.

Intrigued? Come and see us at:

the first

First Federal of South Carolina
301 College Street
Greenville, SC 29601

We Are An Equal Opportunity Employer

ADMINISTRATIVE CLERK

MARKETING

KEMET Electronics, a Greenville-based electronics firm, is a leading manufacturing/supplier of solid tantalum and ceramic monolithic capacitors.

The KEMET team needs an individual with the following skills:

- Computer experience - IBM PC
- Working knowledge of LOTUS 1-2-3
- 2-year degree or equivalent experience
- Excellent communication skills
- Excellent math skills
- Excellent organizational skills

The successful candidate will be responsible for the preparation and distribution of various reports on a weekly, monthly, quarterly, semi-annual, and annual basis. Input data from these reports into PC to prepare reports and graphs for senior management. Some general office duties. Interface with the data processing department.

KEMET offers a competitive salary and comprehensive benefits. Please send a detailed resume, including salary history and requirements, in strict confidence, to:

Bill Cooper
KEMET ELECTRONICS CORPORATION
P.O. Box 5928
Greenville, SC 29606

No Third Party Referrals, Please. An Equal Opportunity Employer M/F

PERSONNEL ANALYST RECRUITMENT

Associate Degree and one year experience in personnel, business, or related field; or an equivalent combination of education and experience. Previous experience in recruitment and screening of applicants a plus. Salary $20,891.

Apply: 10 AM - 4 PM, Mon-Fri.
G'ville County Personnel Dept.
301 University Ridge
Suite 500, County Square
Greenville, SC 29601
EEO/AA Employer

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ADMINISTRATIVE CLERK

MARKETING

KEMET Electronics, a Greenville-based electronics firm, is a leading manufacturing/supplier of solid tantalum and ceramic monolithic capacitors.

The KEMET team needs an individual with the following skills:

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Bill Cooper
KEMET ELECTRONICS CORPORATION
P.O. Box 5928
Greenville, SC 29606

No Third Party Referrals, Please. An Equal Opportunity Employer M/F

FURMAN UNIVERSITY OFFICE OF MAJOR GIFTS.

—Foundation, Corporate, and Governmental Relations—

Individual needed to assist the Director of Major Gifts in preparing grant proposals. Will also assist in gathering data for proposals, monitoring progress of on-going programs and type lengthy manuscripts, charts & tables. Will also be responsible for performing other dutiesof the Office of Major Gifts. Position requires excellent interpersonal skills, ability to produce high volume of work and manage several tasks concurrently while maintaining accuracy. Excellent word-processing skills are essential. Position requires high school diploma, at least 5 years experience or Associate Degree with 3 years experience. Apply in person, Furman University, Personnel Office, Administration Building Basement.

EOE/AAE

QUALITY ASSURANCE TECHNICIAN

High School education or equivalent required. One to two years additional education preferred. Minimum of one year experience in a quality oriented laboratory environment working with physical testing equipment. Position available on rotating shifts.

SEND RESUME TO:
VYTECH INDUSTRIES, INC.
(Formerly Stauffer Chemical Co.)
P.O. Box 5788
Anderson, SC 29623
or
APPLY IN PERSON OFF PEARMAN DAIRY ROAD Monday, July 31 or Tuesday, August 1st
between 1:00 and 4:00 p.m.
An Equal Opportunity Employer

ADMINISTRATIVE ASSISTANT

Immediate opening for an experienced individual to control and coordinate the content, quality, production, and distribution of technical documentation, and to provide secretarial support to department manager and direct reports. The position requires strong office practice and interpersonal skills, typing speed of 50+ WPM, personal computer experience, strong attention to detail, and the ability to handle multiple tasks simultaneously. Applicants should hold an associate degree in Secretarial Science.

NCR offers an extensive benefits package and an excellent work environment. For consideration in this excellent growth opportunity, employment applications may be completed at our Liberty location or resume with salary history may be submitted to the address below. No phone calls please.

NCR Corporation
Personnel Resources Dept.
1150 Anderson Drive
Liberty, SC 29657

NCR

"When you know where we're going, you'll choose NCR"
An Equal Opportunity Employer

COMPUTERLAND OF GREENWOOD

ComputerLand of Greenwood has an immediate opening for the position of Computer Service Technician to cover the Greenwood and Anderson areas. Qualified applicant must have an Associates Degree in Electronic Engineering or equivalent. Previous experience with IBM and compatible Personal Computers preferred. Applicant must be able to provide his/her own transportation. Send resume and cover letter in confidence to:

ComputerLand of Greenwood
1219-E Montague Ave.
Greenwood, SC 29649
Attn: Service Manager
EOE

ASSOCIATE DESIGNER

Due to continuing expansion, CRYOVAC has an immediate opening for an Associate Designer. Position assists engineers in the design, development, manufacture and evaluation of process mechanical equipment. Associate degree in MET or equivalent required. A minimum of 5 years experience in mechanical machine design required. AutoCAD experience preferred.

In addition to a competitive salary structure, CRYOVAC offers paid medical and dental coverage, a 401K savings plan, long term disability, retirement and life insurance plans.

Please submit resume including salary history in confidence to:

EMPLOYMENT COORDINATOR
CRYOVAC Division
W.R. Grace & Co.
P.O. box 464
Duncan, SC 29334

EOE M/F/V/H

PROGRAMMER

Tech school graduate or equivalent experience. Opportunity to gain experience working with a wide variety of applications and several operating systems & languages. Unix knowledge a plus. We are strong in IBM S/36 and AS/400. Stable 15 year old locally owned and managed software development and support company. Free garage parking close to our unique downtown office.

J.L. Kisner & Co., Inc.
P.O. Box 6667
Greenville, S.C. 29606
(803) 233-6961

BOSCH CORPORATION

Bosch Corporation, an international manufacturer of quality automotive, electrical and fuel injection products has the following openings:

QUALITY ELECTRONIC TECHNICIAN

- Two year technical degree in Industrial Electronics and two years related experience.
- Skilled in trouble shooting and the repairing of electronic/electrical equipment.
- Knowledge of accepted inspection techniques, MIL-STDs and Statistics.

UTILITIES TECHNICIAN

- Two year technical degree in Industrial Mechanics or Electronics and two years related experience.
- Power plant and waste treatment facilities experience.
- Experience in electrical and electronics work, programmable controls and computer operations.

Qualified applicants should respond to:

Professional Recruiter
c/o Bosch Corporation
P. O. Box 2867
Anderson, SC 29622

BOSCH

An Equal Opportunity Employer

Maintenance Electrician

American House Spinning is seeking a person with 5 years experience in the installation, maintenance and trouble-shooting of industrial equipment and systems. High School Diploma or GED certificate a must with trade or technical background preferred. Come by in person or send resume to:

American House Spinning

MANUFACTURING ENGINEERING SECRETARY

Square D Company, an international leader in the electrical/electronics industry, has an opening for a Manufacturing Engineering Secretary.

Responsibilities will include executing secretarial duties for the Manufacturing Engineering Department. Must be organized, highly motivated individual. Two year Secretarial Science Degree preferred. Strong Personal Computer skills, including word processing, Lotus, Dbase II required. Must be able to type 65 WPM and have at least two years related work experience.

For consideration, send resume to:

Human Resources
SQUARE D COMPANY
1990 Sandifer Blvd.
Seneca, SC 29678

EEO
M/F/H/V

TECHNICAL WRITER

Large machine manufacturer needs enthusiastic hands-on type person to organize, create and write technical publications. The successful candidate should have a minimum of a two year technical degree and demonstrated experience on desktop publishing systems in the technical interpretation/documentation field. Reply to:

BOX S-P
News-Piedmont
Greenville, SC 29602

An Equal Opportunity Employer M/F/V/H

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RESEARCHING A CAREER

This activity will allow you to examine a career which interests you. In this activity you will research:

- duties and responsibilities
- working conditions
- employment projections (local, state, and national)
- salary ranges
- postsecondary educational requirements
- ways of financing postsecondary education

It is your responsibility to locate sources of information about this career. Possible sources include the Dictionary of Occupational Titles, Occupational Outlook Handbook, South Carolina Occupational Information System, and the local employment agency.

CAREER TITLE____

DUTIES AND RESPONSIBILITIES__________________________
____
____
____
____

WORKING CONDITIONS

Normal Working Hours________________________________

Work Environment____________________________________

Supervision Required________________________________

Safety Factors______________________________________

ADVANCEMENT OPPORTUNITIES____________________________
____
____

HIGH SCHOOL PREPARATION______________________________
____
____

SALARY RANGE____

WHAT BENEFITS ARE AVAILABLE (ex. insurance, paid vacation, retirement plans)?_________________________________
____
____
____

PRESENT EMPLOYMENT PROJECTIONS

Local______________________________

State______________________________

National____________________________

FUTURE EMPLOYMENT PROJECTIONS

Local______________________________

State______________________________

National____________________________

POSTSECONDARY EDUCATION REQUIREMENTS________________

AREA POSTSECONDARY EDUCATIONAL INSTITUTIONS WHICH PROVIDE TRAINING

WAYS OF PAYING FOR POSTSECONDARY EDUCATION____________

CHARACTERISTICS MOST APPEALING ABOUT THE CAREER__________

CHARACTERISTICS LEAST APPEALING ABOUT THE CAREER______________________

SOURCES OF INFORMATION ABOUT THE CAREER______________________

WHAT ARE THE BENEFITS OF HAVING POSTSECONDARY EDCUATIONAL TRAINING?______________________

Accountant

Administrative Assistant

Landscape Architect

Ambulance Attendant

Architect

Auto Mechanic

Biomedical Equipment Technician

Chemical Engineer

Chemical Laboratory Technician

Child Care Worker

Clinical Laboratory Technician

Computer Programmer

Computer Service Technician

Computer Systems Analyst

Chef

Cosmetologist

Dental Assistant

Dental Hygienist

Dental Laboratory Technician

Dialysis Technician

Clinical Dietitian

Disc Jockey

Electrical Engineer

Electrocardiograph Technician

Electro-encephalographic Technician

Electromechanical Technician

Emergency Medical Technician

Engineering Technician

Fashion Designer

Security Guard

Actuary	**Medical Assistant**
Lawyer	**Ophthalmic Laboratory Technician**
Paralegal	**Science Technician**
Travel Agent	**Information Clerk**
Corrections Officer	**Home Health Aide**

Heating, Cooling, and Refrigeration Mechanic

Industrial Engineer

Insurance Agent

Elementary School Teacher

Laser Technician

Legal Assistant

Licensed Practical Nurse

Manufacturing Engineer

Mechanical Engineer

Mechanical Engineering Technician

Medical Record Technician

Medical Technologist

Nuclear Medical Technologist

Numerical Control Machine-Tool Operator

Employment Interviewer

Nursery Worker

Occupational Therapist

Personnel Manager

Pharmacist

Photojournalist

Physical Therapist

Physician

Physician's Assistant

Police Officer

Process Control Programmer

Quality Assurance Inspector

Quality Control Coordinator

Radio, TV Announcer & Newscaster

Radiologic Technologist

Recreational Therapist

Registered Nurse

Respiratory Therapist

Retail Sales Manager

Robotics Technician

Secondary School Teacher

State-Highway Police Officer

Surgical Technologist

Systems Analyst

Technical Writer

Tool-and-Die Maker

Ultrasound Technologist

Phlebotomy Technician

Veterinarian

Medical Laboratory Technician

Veterinarian Laboratory Technician

Histologic Technician

Graphic Artist

Construction Manager

Automated Manufacturing Technician

Health Services Manager

EMPLOYEE INTERVIEW

OCCUPATION TITLE____

JOB RESPONSIBILITIES____

HOW HAS THIS JOB CHANGED IN THE PAST TEN YEARS?_______________

____

____

____

____

____

WHAT NEW SKILLS HAVE YOU HAD TO LEARN TO MAINTAIN THIS JOB?____

____

____

____

____

____

____

WHAT TYPES OF MATH SKILLS ARE USED IN THIS OCCUPATION?__________

____

____

____

____

WHAT TYPES OF COMMUNICATION SKILLS ARE USED IN THIS OCCUPATION?

____

____

____

____

____

HAVE YOU CHANGED JOBS IN THE LAST FIVE YEARS? IF SO, HOW DID THE SKILLS YOU LEARNED ON THE OLD JOB HELP YOU LEARN THE NEW JOB MUCH QUICKER?____

____

____

____

____

____

____

UNIT II--PERSONAL INVENTORY

CAREER PROFILE

My main interests are:

1. ______________________
2. ______________________
3. ______________________
4. ______________________

My main values areas are:

1. ______________________
2. ______________________
3. ______________________
4. ______________________

My hobbies are:

1. ______________________
2. ______________________

Which of the following do you prefer to work with?

____data
____data and things
____people
____things
____data and people
____data, people, and things
____people and things

My favorite classes in school are (have been):

1. ______________________
2. ______________________
3. ______________________
4. ______________________

The career I would most like to pursue is ______________________.

What are the duties and responsibilities of this career?
____
____
____
____

Are the duties and responsibilities of this career consistent with my values and attitudes?______________________

Do I have the required aptitudes to be successful in this career?
____

What additional aptitudes would I need to be successful in this career?____
____

What are the working conditions associated with this career?

____
____
____
____

Are the working conditions of this career consistent with my values and attitudes?_______________________

What educational requirements exist for this career?

____
____
____

Are these educational requirements consistent with my favorite subjects?____

DECISION! DECISION!

Is this career a good choice for me?__________________

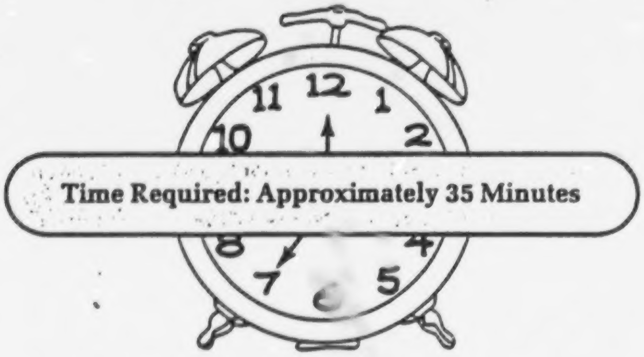
If not is there an associated career which would better fit my values, attitudes and aptitudes?_______________________

What is the career?____

Greene, Lawrence and Jones-Bamman, Leigh. Getting Smarter.
Belmont, CA; David S. Lake Publishers

CHAPTER 1

Taking a Look at Yourself



Time Required: Approximately 35 Minutes

In this chapter you will examine

1. your present study habits
2. your priorities
3. your goals

Evaluating Your Study Habits

Understanding how you study is an important step in the process of improving your study habits. In this book the word *study* includes doing homework and preparing for tests.

The following checklist will help you see where you need improvement. Be honest with yourself. Fill out the checklist to reflect the way you are, not the way you think you should be.

Study Habits Checklist

Yes or No

1. Do you have goals for yourself? ______________
2. If you have goals, are you working toward achieving them? ______________
3. Do you usually have all the supplies you need to do your work at school? ______________
4. Do you usually have all the supplies you need to do your work at home? ______________
5. Do you usually write down your assignments? ______________
6. Do you usually remember instructions? ______________
7. Do you usually study in a quiet place? ______________
8. Do you usually study without a lot of interruptions? ______________
9. Do you have a written weekly schedule? ______________

Look over your answers on the checklist. If you have answered *No* to any of the questions, the study skills in this book can help you. Learning them will make doing homework and studying for tests much easier.

Once you have completed the exercises in this book, you should be able to answer *Yes* to most, and perhaps all, of the same questions!

Establishing Priorities

Imagine that you are on a large sailboat in the Caribbean Sea. Suddenly you hit a floating log which rips a hole in the bow. You estimate that you have fifteen minutes before the boat sinks. There is a small lifeboat on board. You must quickly load it with the supplies you need to survive. You realize that it may be weeks before you are rescued.

Here is a list of the things on the sailboat that you may choose from to supply the lifeboat:

- Flashlight
- Batteries
- First-aid kit
- Dry clothes
- School books
- Bottled water
- Canned food
- Perfume
- Fishing gear
- Portable grill
- Portable radio transmitter
- Suntan lotion
- Travelers' checks
- Paper napkins
- Cassette tape recorder
- Hair dryer
- Flares

Now list the items in *order of importance* to your survival at sea. The most important item will be first on your list.

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________
11. ______________________________
12. ______________________________
13. ______________________________
14. ______________________________
15. ______________________________
16. ______________________________
17. ______________________________

Each person faced with the sinking boat situation will probably arrange the items on the list somewhat differently. Although you might decide that a first-aid kit is more important than a flashlight and batteries, it is clear that food and water should be placed at the top of the list. Food and water are essential to survival. Without them, it is doubtful that you could survive for more than two or three days.

The process of deciding what to take with you on the lifeboat involves **establishing priorities**. Establishing priorities means listing or ranking things in order of importance. The importance of some of the items will vary from person to person. For example, if you sunburn easily, taking suntan lotion is a priority. However, it should be apparent to *everyone* that flares and fishing gear are more important for survival than perfume or a hair dryer!

When you establish a priority, you decide that something is more important to you than something else. Establishing a priority is simply recognizing that something is meaningful or essential to you. Once you recognize a priority, the next step is to place that priority high on your list of things to do or accomplish.

Establishing goals for your life also involves establishing priorities. Suppose, for instance, that you want very much to become a fashion designer, but you are failing English. Your immediate priority is to figure out how to pass English. You recognize that if you don't pass the course, you will not graduate from high school. Very few employers will hire someone who hasn't graduated from high school.

A typical list of things to do follows. Pretend that you must arrange them in order of priority. Put the most important item first.

- Get a date for Friday night
- Clean up my room
- Change the strings on my guitar
- Study for the history midterm exam to be given tomorrow
- Buy tickets to next Sunday's concert
- Explain to the coach why I missed practice yesterday
- Go shopping for jeans
- Complete the chemistry problems that are due tomorrow
- Talk to my parents about increasing my allowance
- Recopy my English essay that is due by fourth period today

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________

Although priorities will vary among people, most students will agree that the English essay, the chemistry problems, the history exam, and the discussion with the coach are very high priorities. The exact order of these priorities would depend on factors like the following:

- How long the English essay is and whether you have a study hall before fourth period
- How much studying remains to be done for the history test
- How long the chemistry problems should take to complete
- How upset the coach gets when you miss practice

At any given time, some activities are more important than others. Once you get in the habit of establishing priorities, you can use this skill to set goals for yourself.

Getting What You Want

When Jodi was in fifth grade and went to her first high school football game, she knew that she wanted to be a cheerleader someday. Being a cheerleader seemed exciting and glamorous to Jodi.

By the time Jodi entered high school, she was aware that there were girls in her class who were more coordinated and, perhaps, more popular than she was. Most of them also wanted to become cheerleaders. This did not discourage Jodi. She was certain that she would become a cheerleader.

To make the squad, Jodi realized that she would have to work very hard. She would have to be able to do each cheer better than anyone else trying out. She knew that she would have to project her enthusiasm, her personality, and her spirit.

Jodi also realized that she had to make sacrifices. Instead of spending her free time with her friends after school, Jodi worked for at least an hour practicing the cheers and the routines. After mastering one cheer, she would begin preparing and practicing the next one.

Jodi's practice and preparation paid off. She was selected to be on the freshman cheerleading squad and, later, she became the captain of the varsity squad.

You, too, can get what you want. Like Jodi, you must first establish goals and then work to achieve them. Jodi's long-term goal was to be a cheerleader, and her short-term goals were to master the cheers. You will find that short-term goals are necessary in order to achieve long-term goals.

Establishing Goals

When you define your goals, you provide yourself with a very important sense of direction. You become sure about where you are heading and what you need to achieve in order to get what you want out of life.

If you were to talk with the best students in your class about school, you would find that the majority of them have thought about their short-term and long-term goals. Typically, the best students define good grades as one of their most important short-term goals. Being accepted into college or getting a particular job is often one of their long-term goals.

Let's assume that you know what you want to do when you finish school: you have decided to become a veterinarian. To become a veterinarian, you probably know that first you must graduate from high school with good grades. After high school you must go to college and get good grades there. Finally, you must be accepted at a school of veterinary medicine. Because so many students want to become veterinarians, getting into such a school is extremely difficult. The programs are highly competitive, and only the best students are accepted.

Once you realize that becoming a veterinarian is not an easy process, you are faced with the challenge of figuring out how to achieve your goal. Here's the challenge:

Long-Term Goal: To become a veterinarian

Short-Term Goals (These goals may be monthly or yearly, but they must be achieved in order to reach the long-term goal.):

1. Take the required science courses.
2. Get good grades throughout four years of high school.
3. Impress your teachers with your performance so that they will recommend you for college.
4. Begin saving money for college expenses.

If you don't have any long-term goals, don't be discouraged. This is perfectly normal for a young person. Begin by getting used to thinking about your future. Once you do set some long-term goals for yourself, don't be afraid to change them. It is normal to change goals as you mature.

On page 12 you will find a sample **Goal Organizer**. It has been filled out to show you how a typical student might establish his or her goals. On page 13 you will find your own Goal Organizer. After you understand how the sample Goal Organizer has been filled out, complete your own Goal Organizer.

If you do have long-term goals, fill them in. If not, focus on short-term goals such as getting a good grade in your science class. Remember that *a good high school record will permit you to choose what you want to do with your life.*

Please note that weekly and daily goals have also been filled in on the sample Goal Organizer. Students who choose to establish daily and weekly goals for themselves will become "super organized." They probably will find that they have more free time than they realized!

Sample Goal Organizer

LONG-TERM GOALS

1. Graduate from high school with a **B** average or better.
2. Become a starter on the varsity basketball team.
3. Qualify for a college scholarship.
4. Become a lawyer.

SHORT-TERM GOALS

1. Receive a minimum of **B** on the next English book report.
2. Complete a review of the first six chapters in the history text.
3. Copy biology notes for the two days absent last week.
4. Receive a minimum of **B** on the next algebra test.

WEEKLY GOALS

1. Complete all science problems by Thursday.
2. Compare history notes with Joan.
3. Read a minimum of thirty pages in the novel for the next book report.
4. Review Spanish vocabulary from previous weeks.

DAILY GOALS

1. Check to make sure I have written down all assignments.
2. Be sure to hand in daily Spanish sentences on time.
3. Check to make sure I have all science handouts.
4. Get to gym class on time!

Goal Organizer

LONG-TERM GOALS

1.

2.

3.

4.

SHORT-TERM GOALS

1.

2.

3.

4.

WEEKLY GOALS

1.

2.

3.

4.

DAILY GOALS

1.

2.

3.

4.

Keeping Track of Your Achievements

Check off each goal as it is achieved. It's a good idea to replace each achievement with a new goal. Sometimes, however, you may simply want to achieve all of your goals, check them off, and then take it easy or "coast" for a while. You will have to decide if coasting is appropriate for you.

Achieving goals is something like losing weight. At first, people might not realize that you are getting thinner. As you continue to lose weight, however, your friends will start to become aware of the new you.

Each time you achieve your goals, give yourself a pat on the back. *You deserve to be acknowledged!* When you first start using this new system of establishing goals, your teachers and your parents may not recognize the improvement. They may not notice that your work is now handed in on time or that your assignment book is always organized. Results take time, but just remember: everyone will become aware of the new you as soon as they see your better grades.

Making Your Goals a Part of Your Life

It is a good idea to tape your Goal Organizer to the wall near your desk so that you can see it when you study. For fun, put your long-term goals in a sealed envelope. Put the envelope away. Every six months open the envelope and take a look at what you wrote. Change the goals if you wish, and reseal the envelope.

Establishing and reviewing goals can help make the sacrifices involved in getting an A on the chemistry exam seem worthwhile. Deciding to study while other kids are outside socializing can be a real test of how serious you are about achieving your goals. When you are certain of what your priorities are, having to discipline yourself becomes much less of a problem.

It is possible that your long-term goals will not change during your years in junior high school, high school, and college. But it is also possible that these long-term goals will undergo many changes as you get older. Don't be ashamed or afraid to change your mind about what you want to do with your life. A fifteen-year-old who wants to be a computer programmer or a basketball player has as much right to change career goals as a child who decides at four years of age that she wants to be a cowgirl when she grows up.

What You Have Learned in This Chapter:

1. *How to evaluate your study habits*
2. *How to establish priorities*
3. *How to establish short-term goals*
4. *How to establish long-term goals*
5. *How to keep track of your achievements*

INTO THE FUTURE

Individuals often dream about what they would like to be in the future. This activity is designed to give students the opportunity to "daydream" about what they would like to accomplish in life.

Tell they students they are going to be taking a trip on the Fantasy Cruise Line. This trip is designed to give them the opportunity to succeed at any career they wish to choose. After students have spent a few minutes dreaming about their ideal career, have them take approximately 15 to 20 minutes to answer the following questions concerning this career.

> What career have I chosen?
>
> Do I feel I possess the self-confidence to be successful in this career?
>
> If not, how would I have to change my self-image to reach this goal?
>
> What type of training is needed to become successful in this career?
>
> What do I need to begin doing now to prepare for this career?
>
> What courses do I need to take in high school as foundational courses to reach this goal?

After students have finish writing, ask for volunteers to share with the class what they have written.

FOLLOW-UP ACTIVITY

A follow-up activity is to have students prepare two or three short-, medium-, and long-range goals which serve as markers for becoming successful in this career.

Short-range goals may include reading about the career. Medium-range goals may include interviewing an individual presently employed in the career or writing someone employed in the career. Long-range goals may include taking advanced level courses in high school and completing at least some type of postsecondary educational program.

Have students develop these goals and include them, along with the Fantasy Cruise writing, in their careers notebook.

UNIT III--MID-LEVEL TECHNOLOGY CAREERS

RESEARCHING A CAREER

This activity will allow you to examine a career which interests you. In this activity you will research:

- duties and responsibilities
- working conditions
- employment projections (local, state, and national)
- salary ranges
- postsecondary educational requirements
- ways of financing postsecondary education

It is your responsibility to locate sources of information about this career. Possible sources include the **Dictionary of Occupational Titles, Occupational Outlook Handbook, South Carolina Occupational Information System,** and the **local employment agency.**

CAREER TITLE______________________________

DUTIES AND RESPONSIBILITIES______________________________
____
____
____
____

WORKING CONDITIONS
Normal Working Hours______________________________
Work Environment______________________________
Supervision Required______________________________
Safety Factors______________________________

ADVANCEMENT OPPORTUNITIES______________________________
____
____

HIGH SCHOOL PREPARATION______________________________
____
____

SALARY RANGE______________________________

WHAT BENEFITS ARE AVAILABLE (ex. insurance, paid vacation, retirement plans)?______________________________
____
____
____

PRESENT EMPLOYMENT PROJECTIONS

Local______________________________

State______________________________

National______________________________

FUTURE EMPLOYMENT PROJECTIONS

Local______________________________

State______________________________

National______________________________

POSTSECONDARY EDUCATION REQUIREMENTS______________________________

____

____

____

____

AREA POSTSECONDARY EDUCATIONAL INSTITUTIONS WHICH PROVIDE TRAINING

____

____

____

____

WAYS OF PAYING FOR POSTSECONDARY EDUCATION______________________________

____

____

____

____

CHARACTERISTICS MOST APPEALING ABOUT THE CAREER______________________________

____

____

____

____

CHARACTERISTICS LEAST APPEALING ABOUT THE CAREER

SOURCES OF INFORMATION ABOUT THE CAREER

WHAT ARE THE BENEFITS OF HAVING POSTSECONDARY EDCUATIONAL TRAINING?

UNIT IV--SELF-ESTEEM

ARE YOU BEING MANIPULATED?

Very often people use subtle means to get what they want from others. People who use these tactics are very good at manipulating others. Manipulation refers to the process by which individuals use skill and tenacity to get others to go along with them.

Manipulation is often a game requiring at least two players. One players **wants** something, while the other player **needs** something. If you are the one in need, you may be unaware the other player is manipulating you by offering what you need. You may need to back up and review the situation to make sure the other player is sincere in his motives, and is not trying to manipulate you into doing something for him.

There are different types of manipulators. Dr. Pat Palmer, in a book entitled TEEN ESTEEM: A Self-Direction Manual for Young Adults, discusses several types of manipulative styles. Several of these styles will be briefly highlighted.

After the discussion of the styles, several activities will allow students the opportunity to explore self-esteem and manipulation.

MANIPULATIVE STYLES

The Victim The victim, as a manipulator, takes a passive role and "invites" others to come and take care of him. He takes on a role of helplessness and portrays the necessity of needing someone to solve his problems and give him lots of sympathy. Victims offer other individuals the opportunity to feel authoritative, compassionate, and smart.

The Depressed The depressed, as a manipulator, chooses to give up the happy things in life and focuses on the negative aspects. The depressed person focuses his attention to the bad side of every situation. He has chosen to see only the "bad" about life. The depressed, like the victim, tries to get people to feel sorry for him and hopefully get others to take care of him.

The Blamer This individual is unable to identify why he is unhappy. It may range from the weather to being hurt by another person. This type of manipulator tries to get others to take responsibility for his life and make it up to him. He is very adept at making others feel guilty. The only way guilt is removed is to have others take responsibility for what appears to be going wrong.

The Hypochondriac The hypochondriac chooses sickness as a way of manipulating others. His main goal is to get others to feel sorry for him and to take care of him. The hypochondriac chooses pain and suffering over joy and happiness. This type of manipulator may actually feel physical pain as a part of the manipulative process.

The Rescuer This individual comes to the help of someone who is weak and in need. The rescuer takes the position of "I will help you but you will be mine. I will earn your love by what I do to meet your needs." The rescuer says "I will be brave and strong and you will have to be weak and needy in order for this relationship to prosper."

The Martyr The martyr also uses guilt to manipulate others but does so in the reverse of the victim. The martyr works extremely hard to meet the needs of an individual. The martyr takes on the attitude of "I will work so hard that you will not be able to get along without me. You will need me."

The Enabler The enabler is an individual who unwittingly brings harm to another person. The enabler does not necessarily mean to cause the harm, but cannot bring himself to stop supplying the harmful item. An example of an enabler would be a wife who knows her husband should not have large amounts of cholesterol but does nothing to reduce the husband's cholesterol intake through proper dieting.

Often a person with low self-esteem will allow himself to be manipulated because he feels guilty or does not think himself able to meet his own needs. Others pick up on this attitude and often exploit the person. Manipulators see absolutely nothing wrong in what they are doing. These people are often quite capable of justifying their actions. Manipulative people often feel they are giving those being manipulated a sense of belonging. Yet manipulative people do not realize they are actually doing more harm than good.

ACTIVITY I

The following scenario provides an opportunity to discuss types of manipulators. This example should be discussed, giving students an opportunity to make suggestions as to how the person being manipulated might go about changing the situation.

Cheri is a varsity cheerleader who would rather be with friends, having a good time, than doing homework assignments. Ceth is an intelligent young man although he is only average in appearance and athletic ability. At the beginning of the school year, Cheri "confessed her love" for Ceth. Because of her extracurricular activities, Cheri tells Ceth she does not always have time to do her homework. Ceth, because of Cheri's "confessed love", lets her copy his homework and sometimes makes a copy of the homework for her. He has also written several reports which Cheri has copied and turned in as her own.

Ceth's friends have been trying to tell him he is only being used. Cheri really does not love him. However, Ceth is unable to see the situation as it really is. He sees nothing wrong with helping Cheri with her homework. Some of Cheri's friends have also been trying to show her she is being manipulated also. Yet she tells them she is not being manipulated and that no harm will come to her because of the relationship.

Using the above scenario, discuss the following questions.

1. Is Cheri a manipulator?
2. If so, what type of manipulator is she?
3. Is Ceth a manipulator?
4. If so, what type of manipulator is he?
5. How would you help Ceth realize he is being manipulated?
6. What suggestions might you offer Ceth to help him not get caught in this type of relationship again?
7. How does this relationship affect Ceth's self-esteem?
8. What will happen to Ceth when he "owns up" to the real reason behind the relationship?
9. How could you show Cheri she is being manipulated even though she is not aware of it? How will this affect her in the future?

ACTIVITY II

One way to find out if you are being manipulated by someone, or if you are manipulating someone, is to keep a weekly log of activities. By keeping a log, you can see situations in which you were manipulated or you manipulated someone else. Keeping the log will also allow you to examine your behaviors to determine if you exhibit manipulative behaviors.

If a particular event in which you feel you were manipulated or you manipulated someone else occurs, write down the event and analyze the situation. Think about what happened and what you can do to avoid the situation the next time you see it beginning to happen.

Some suggestions of how to keep from being manipulated by others are:

1. Ask the person what he wants. Be upfront and honest with the person. This will help the person realize the importance of getting directly to the point when dealing with you.
2. Be direct in your approach. Don't "run around in circles" trying to guess others' motives, just ask.
3. Be a role model. Try not to become manipulative. Express your wants and needs clearly. Others will see the honesty you have and will strive to be honest when dealing with you.
4. Give up being manipulative. This will take a great deal of effort on your part. However, once you see yourself as being honest in all situations, you will grow to like yourself better and will begin to increase your self-esteem and self-identity.

ACTIVITY III

The following questions will give students an opportunity to discuss manipulation and the role it plays in degrading the self-esteem of others. There are no right or wrong answers.

QUESTIONS

1. Why is a person with low self-esteem easily manipulated?

2. How can you help a friend who is being manipulated step back from a situation and see the things as you see them?

3. How would you react if someone claimed you were manipulating people to get your way? What could you do to change your behavior?

4. Why is it hard for a manipulative person to realize his faults and bring about a change in behavior? Is he building his own self-esteem at the expense of others? Does the manipulative person have low self-esteem himself?

5. Recall a time when you manipulated someone, a friend, a brother or sister, your parents, to get something you wanted. Put yourself in his position. Try to imagine how the other person felt as a result of your manipulative behavior. Did your behavior increase or decrease the self-esteem of the other person? How do you feel about your own behavior now that you have taken a closer look at the situation? How would you have felt if you were the individual that was manipulated?

UNIT V--JOB SEARCHING SKILLS

DATE:

This application is active for a period of 30 days.

EMPLOYMENT APPLICATION

AN EQUAL OPPORTUNITY EMPLOYER

Answers to the following questions will provide the Company with an accurate record of your personal history. This questionnaire is to be completed in your own handwriting — not typed. **Please use ink.** Please answer every question. If a question cannot be answered, write N/A (not applicable).

PERSONAL INFORMATION

Name	Last	First		Middle	Social Security Number
Present Address	Street Number	City	State	Zip	How long have you lived here?
Previous Address	Street Number	City	State	Zip	How long did you live there?

Home Telephone No. (   )

Business Phone No. (   )

Are you 18 years of age or older? ☐ Yes ☐ No

Are you legally authorized to work in the United States of America? ☐ Yes ☐ No

Have you ever applied to, or been employed by If yes, when? ☐ Yes ☐ No

Have you ever been employed in the industry or with a company affiliated with the industry? ☐ Yes ☐ No

Names of relatives or friends employed by

Do you have relatives or friends who are employed in the industry? ☐ Yes ☐ No

Who referred you to us? In (City):

GOALS

POSITION DESIRED: 1st CHOICE	Date on which you can start
POSITION DESIRED: 2nd CHOICE	Income requirements

GEOGRAPHICAL PREFERENCES TRAVEL

Location preferred? Why?

Are you willing to relocate any place in the USA? Any restrictions?

What percentage of time can you devote to traveling overnight away from home?

Are you willing to rotate shifts? ☐ Yes ☐ No Are you willing to work weekends? ☐ Yes ☐ No

PHYSICAL

A physical examination which includes drug screening is required for employment by
Are you willing to submit to this examination? ☐ Yes ☐ No

How much time have you lost from work/school because of illness or injury during the past two years?

Do you have any physical or mental condition(s) which would limit your ability to perform the particular job for which you are applying? ☐ Yes ☐ No

If yes, what could we do to accommodate you? ______________________________

____

MTC 029-004 (9/87)

WORK HISTORY

Beginning with the most recent, list below the names and addresses of all your employers: a) Company names, b) address and telephone number Please list every period of employment even though it may not seem relevant to the position applied for.	TYPE OF BUSINESS (PRODUCT AND/OR SERVICES)	TIME EMPLOYED				NATURE OF WORK AT START (duties, title, location)
		FROM		TO		
		Mo.	Yr.	Mo.	Yr.	
1. a. .... b.						
2. a. .... b.						
3. a. .... b.						
4. a. .... b.						
5. a. .... b.						
6. a. .... b.						
7. a. .... b.						

UNITED STATES MILITARY RECORD

ACTIVE DUTY				BRANCH OF SERVICE	DUTIES PERFORMED	HIGHEST RANK
FROM		TO				
Mo.	Yr.	Mo.	Yr.			

Please describe any education or special training received while in the military service of the United States.

EDUCATION

CIRCLE HIGHEST GRADE COMPLETED 1 2 3 4 5 6 7 8 9 10 11 12 COLLEGE 1 2 3 4 5 6

	NAME AND LOCATION OF SCHOOL	DATES				GRADUATED Yes — No	Diploma, Degree or Credit Hours Completed	MAJOR SUBJECT
		From		To				
		Mo.	Yr.	Mo.	Yr.			
Grade School(s)								
High School(s)								
College(s)								
Graduate School(s)								
Trade, Bus. Night, Corr. School(s)								

Extracurricular Activities (other than military, racial, religious, or nationality groups)

Principal source of your spending money while in high school and college

SCHOLASTIC STANDING: High School_______ College (GPA)_______ Graduate School_______

LIST SCHOLASTIC HONORS

LIST PROFESSIONAL LICENSES

Describe any other Training or Education (Foreign language training/skills may be included):

TOTAL MONTHLY WEEKLY EARNINGS AT START	NATURE OF WORK AT LEAVING (duties, title, location, territory, etc.)	TOTAL MONTHLY/ WEEKLY EARNINGS AT LEAVING *(See note)	SUPERVISORY POSITIONS HELD	NO. OF PEOPLE SUPER-VISED	REASONS FOR SEEKING CHANGE	NAME OF IMMEDIATE SUPERVISOR
☐ Mo. ☐ Yr.		☐ Mo. ☐ Yr.				Name Title
☐ Mo. ☐ Yr.		☐ Mo. ☐ Yr.				Name Title
☐ Mo. ☐ Yr.		☐ Mo. ☐ Yr.				Name Title
☐ Mo. ☐ Yr.		☐ Mo. ☐ Yr.				Name Title
☐ Mo. ☐ Yr.		☐ Mo. ☐ Yr.				Name Title
☐ Mo. ☐ Yr.		☐ Mo. ☐ Yr.				Name Title
☐ Mo. ☐ Yr.		☐ Mo. ☐ Yr.				Name Title

*Note: Specify for your present or last position

Salary ☐ /Draw ☐: $ ________ per month, Commission: $ ________ per ____ Bonus: $ ________ per ____

Expense Reimbursement: None ☐: Yes ☐: Explain: ____________________

BUS SS SKILLS

☐ Typing (Note WPM) ____________________ ☐ CRT ☐ Word Processor

☐ PC: PC Hardware ____________________ PC Software ____________________

☐ Stenography (Note WPM) ____________________ ☐ Switchboard ☐ Other ____________

Complete the section below only if applying for a position requiring use of a car.

DRIVING SKILLS

Do you possess a valid driver license? ☐ Yes ☐ No	State of Issue
Has your license ever been suspended or revoked? ☐ Yes ☐ No	If yes, from when to when?

SAFETY

Have you had any work related accidents within the past three years? ☐ Yes ☐ No

If yes, please describe:

HOBBIES

Please list any hobbies which may be relevant to the position for which you are applying:

QUALIFICATIONS

SUMMARY OF QUALIFICATIONS: In this section, express in your own words and in essay form, why you believe your skills, training, and experience qualify you for the position desired, and why you feel you would be successful. Please describe your short and long term goals.

PLEASE READ CAREFULLY:

Employment is subject to:

1. My agreement to sign and be bound by an Employee Secrecy and Non-Disclosure and/or Non-Compete Agreement, if hired;
2. Passing a physical examination by company designated physician; and
3. Verification of identity and legal authorization to work in the United States of America.

I understand that all commitments relating to an offer of employment with must be in writing and signed by the authorized personnel representative in order to be binding.

I also understand that this application is not an employment contract and that, if hired, any job I may hold while with is considered at will employment.

I authorize to contact any and all former employers and/or references to verify the information that I have provided on this application. I release and those parties providing reference information to from any and all liabilities or claims arising from the verification process.

I have read and certify that the information I have provided in this application is true and correct. I understand that I may be refused hire or, if hired, my employment will be subject to termination if I have made any omissions or misrepresentations in completing this application.

(SIGNATURE) (DATE)

This application is active for a period of 30 days.

NAME __________ S.S.# __________ DATE __________

Type of work applying for: __________

APPLICATION FOR EMPLOYMENT

FOR MANUFACTURING PERSONNEL

400 S. BUNCOMBE ROAD
P. O. BOX 1404
SOUTH CAROLINA

does not discriminate against any employee or applicant for employment because of race, religion, creed, color, sex, national origin, handicapped (unrelated to ability), status as a veteran or the protected age group.

PRESENT ADDRESS NO & STREET CITY STATE ZIP HOW LONG?

FORMER ADDRESS NO & STREET CITY STATE ZIP HOW LONG?

FORMER ADDRESS NO & STREET CITY STATE ZIP HOW LONG?

HOME PHONE NO	SOCIAL SECURITY NO	TYPE OF POSITION APPLIED FOR
APPROXIMATE WAGE EXPECTED	AVAILABILITY DATE	HOW WERE YOU REFERRED TO

HAVE YOU BEEN PREVIOUSLY EMPLOYED BY OR ANY OF OUR DIVISIONS OR SUBSIDIARIES? ☐ YES ☐ NO IF YES, GIVE LOCATION AND DATES

LIST ANY RELATIVES EMPLOYED BY

NAME RELATION DIVISION

EDUCATION

CIRCLE HIGHEST GRADE COMPLETED 1 2 3 4 5 6 7 8 9 10 11 12

COLLEGE 1 2 3 4 TECHNICAL 1 2 3 4

SCHOOLS ATTENDED NAME(S) AND LOCATION(S)	DATES FROM	TO	GRADUATED YES	NO	CERTIFICATE OR DEGREE	COURSE OR MAJOR
HIGH SCHOOL	MO/YR	MO/YR				
COLLEGE(S)	MO/YR	MO/YR				
TECHNICAL SCHOOL	MO/YR	MO/YR				
OTHER TRAINING	MO/YR	MO/YR				

ARE YOU AT LEAST 18 YEARS OF AGE? ☐ YES ☐ NO IF NOT, PLEASE STATE YOUR AGE ______

ARE YOU A CITIZEN OF THE U.S.?

IF NOT A CITIZEN, ARE YOU PREVENTED FROM BECOMING LAWFULLY EMPLOYED BECAUSE OF VISA OR IMMIGRATION STATUS? ____________

DO YOU HAVE ANY PHYSICAL CONDITION WHICH MAY LIMIT YOUR ABILITY TO PERFORM THE JOB APPLIED FOR?

HAVE YOU EVER BEEN CONVICTED OF A FELONY? ☐ YES ☐ NO IF YES, EXPLAIN

ARE YOU AVAILABLE TO WORK ANY SHIFT?________ OVERTIME?________ WEEKENDS?_______ HOLIDAYS? ____________________

HOW MANY DAYS HAVE YOU BEEN ABSENT FROM WORK DURING THE PAST YEAR? ____________

EMPLOYMENT HISTORY

IMPORTANT — LIST EVERY EMPLOYMENT WHETHER OR NOT IT SEEMS RELEVANT TO POSITION APPLIED FOR IF LAPSE OCCURRED BETWEEN PERIODS OF EMPLOYMENT GIVE DATES OF AND REASON FOR UNEMPLOYMENT

PRESENT OR LAST EMPLOYER

NAME OF EMPLOYER	ADDRESS OF EMPLOYER	DATES EMPLOYED FROM MO ___ YR ___ TO MO ___ YR ___	
TELEPHONE OF EMPLOYER	SUPERVISOR'S NAME & TITLE	DEPARTMENT	STARTING WAGE
YOUR POSITION OR TITLE	REASON FOR LEAVING		ENDING WAGE
DESCRIPTION OF DUTIES			

NEXT PREVIOUS EMPLOYER

NAME OF EMPLOYER	ADDRESS OF EMPLOYER	DATES EMPLOYED FROM MO ___ YR ___ TO MO ___ YR ___	
TELEPHONE OF EMPLOYER	SUPERVISOR'S NAME & TITLE	DEPARTMENT	STARTING WAGE
YOUR POSITION OR TITLE	REASON FOR LEAVING		ENDING WAGE
DESCRIPTION OF DUTIES			

NEXT PREVIOUS EMPLOYER

NAME OF EMPLOYER	ADDRESS OF EMPLOYER	DATES EMPLOYED FROM MO ___ YR ___ TO MO ___ YR ___	
TELEPHONE OF EMPLOYER	SUPERVISOR'S NAME & TITLE	DEPARTMENT	STARTING WAGE
YOUR POSITION OR TITLE	REASON FOR LEAVING		ENDING WAGE
ESCRIPTION OF DUTIES			

NEXT PREVIOUS EMPLOYER

NAME OF EMPLOYER	ADDRESS OF EMPLOYER	DATES EMPLOYED FROM MO ___ YR ___ TO MO ___ YR ___	
TELEPHONE OF EMPLOYER	SUPERVISOR'S NAME & TITLE	DEPARTMENT	STARTING WAGE
YOUR POSITION OR TITLE	REASON FOR LEAVING		ENDING WAGE
DESCRIPTION OF DUTIES			

NEXT PREVIOUS EMPLOYER

NAME OF EMPLOYER	ADDRESS OF EMPLOYER	DATES EMPLOYED FROM MO ___ YR ___ TO MO ___ YR ___	
TELEPHONE OF EMPLOYER	SUPERVISOR'S NAME & TITLE	DEPARTMENT	STARTING WAGE
YOUR POSITION OR TITLE	REASON FOR LEAVING		ENDING WAGE
DESCRIPTION OF DUTIES			

INDICATE YEARS OF EXPERIENCE YOU HAVE IN ANY OF THE FOLLOWING AREAS

TYPE OF EXPERIENCE	OPER.	SET-UP	TYPE OF EXPERIENCE	OPER.	SET-UP	
			GEAR TOOTH GRINDER			
ENGINE LATHE			GEAR CUTTERS			OTHER: ___________
VERTICAL TURRET LATHE			BROACH			___________
HORIZ TURRET LATHE			JIG BORE			___________
EXTERNAL GRINDER			DRILLS			___________
INTERNAL GRINDER			MILLERS			___________
SURFACE GRINDER			NUMERICAL CONTROL			___________

U. S. MILITARY HISTORY

BRANCH OF SERVICE	FINAL RANK	WHAT WAS THE NATURE OF YOUR PRINCIPAL SERVICE ASSIGNMENT?
LENGTH OF SERVICE	DATE OF DISCHARGE	LIST ANY SPECIAL TRAINING YOU RECEIVED

THE FOLLOWING SPACE CAN BE USED TO INDICATE ANY ADDITIONAL INFORMATION CONCERNING YOUR BACKGROUND THAT YOU FEEL WOULD BE USEFUL TO US IN CONSIDERING YOU FOR EMPLOYMENT

LIST ORGANIZATIONS TO WHICH YOU BELONG. ALSO LIST OFFICES HELD. (THOSE ORGANIZATIONS WHICH WOULD REVEAL RACE, RELIGION, COLOR OR ETHNIC STATUS NEED NOT BE LISTED.)

WHAT HOBBIES OR RECREATIONAL ACTIVITIES DO YOU ENJOY?

LIST BELOW THREE PERSONAL REFERENCES. THESE MAY NOT BE RELATIVES OR FORMER SUPERVISORS

NAME	ADDRESS STREET CITY STATE & ZIP	POSITION	TELEPHONE NO.

IN CASE OF EMERGENCY, NOTIFY

NAME ADDRESS TELEPHONE NO.:

I hereby authorize investigation of all statements contained in this record. I certify that such statements are true and understand that misrepresentation or omission of facts called for in this form may disqualify me or be a cause for my termination. If employed, I shall conform to the policies and rules of the Company and will consider all salary and proprietary information of the Company confidential.

Please indicate any other name used during education or employment that would be needed for references:

I authorize to obtain information pertaining to my previous education (release of transcript) or employment record.

I understand that any offer of employment is contingent on my taking and passing a pre-employment physical which includes a comprehensive drug screen.

(Signature of Applicant) (Date)

South Carolina Department of

Form P-8
Revised 5/1/77

APPLICATION FOR EMPLOYMENT

AN EQUAL OPPORTUNITY EMPLOYER

INSTRUCTIONS

Read carefully and give complete answers to all questions in this form. Answers should be written in ink or typed. Return the completed form to the office from which secured, if so instructed, or to the Personnel Director, S.C. Department of . Columbia, S.C. Your application will be filed for six months from date completed and if employment has not been offered you by that time, your application and any attachments will be placed in the inactive file.

Name ______________ (Last) ______________ (First) ______________ (Middle (If married woman, give maiden name))

Local Residence address ______________ (Number and Street) ______________ (City) ______________ (State) ______________ (Zip Code)

Permanent Home address ______________ (Number and Street) ______________ (City) ______________ (State) ______________ (Zip Code)

Phone Number ______________ (Residence) Phone Number ______________ (Home) Social Security No. ______________

PERSONAL

Date of Birth ______________ Height: ______ Feet ______ Inches Weight: ______ Pounds

Have you a physical disability? Yes ☐ No ☐ If yes, what? ______________

Have you had a serious illness during the past five years? Yes ☐ No ☐ If yes, of what nature ______________

Have you any relatives employed by the State of S. C.? Yes ☐ No ☐ If yes, list their names, relationships to you and state agencies where employed:

In case of emergency, notify ______________ (Name) ______________ (Relationship)

Address ______________ (Street and Number) ______________ (City and State) Phone No. ______________

EDUCATION

Type of School	Name and Location of School	Grade or Class Completed	Year Graduated	Major Subjects	Certificate or Degree Received
High					
College or University					
Business or Trade					
Other					

List any equipment or machines with which you are proficient & other skills, qualifications, awards, training courses, etc., related to the position for which you are applying: ______________

EMPLOYMENT DATA — Use this space to describe the type of work you are seeking: ______________

Adding machine ☐ ; Bookkeeping machine ☐ ; Calculating machine ☐ Name:

Key Punch ☐ ; Tabulator ☐ If yes, Model No. Also, board wiring experience and Model No.

Other E.A.M. or E.D.P. machines ☐ If yes, names:

Can you type? Yes ☐ No ☐ If yes, words per minute Can you take dictation? Yes ☐ No ☐ If yes, words per minute

MILITARY SERVICE

Do you belong to a military organization? Yes ☐ No ☐ If yes, name

What is your present selective service classification? (If 4-F, explain)

Served in Armed Forces of U. S.: Yes ☐ No ☐ If yes, branch of service

Date of entry Date of discharge Type of discharge Highest rank attained

Special training received or service schools attended

Reserve status: Branch of service Active ☐ Inactive ☐

EMPLOYMENT RECORD

In space below, list positions you have held. Start with present or last employment and list in reverse order. DO NOT LIST ANY EMPLOYMENT THAT OCCURRED WITH THE STATE NOR ANY PERIOD OF SERVICE IN THE ARMED FORCES.

PRESENT OR LAST EMPLOYMENT

EMPLOYER Type of business

Address Title of position

RATE OF PAY

Date employed Date separated Starting $ per Final $ per

Describe your work

If presently employed, may we contact your present employer regarding your service and employment record? Yes No

Reason for leaving

Name and title of immediate supervisor

PREVIOUS EMPLOYMENT

EMPLOYER Type of business

Address Title of position

RATE OF PAY

Date employed Date separated Starting $ per Final $ per

Describe your work

Reason for leaving

Name and title of immediate supervisor

EMPLOYER Type of business

Address Title of position

RATE OF PAY

Date employed Date separated Starting $ per Final $ per

Describe your work

Reason for leaving

Name and title of immediate supervisor

EMPLOYER Type of business

Address Title of position

RATE OF PAY

Date employed Date separated Starting $ per Final $ per

Describe your work ____

____

____

Reason for leaving ____

Name and title of immediate supervisor ____

EMPLOYER ______________________________ Type of business ______________________

Address ______________________________ Title of position ______________________

RATE OF PAY

Date employed ____________ Date separated ____________ Starting $______ per______ Final $______ per ______

Describe your work ____

____

____

Reason for leaving ____

Name and title of immediate supervisor ____

PROFESSIONS

Profession	Date of Current License or Registration	State Issuing License or State in which Registered	Date of First License or Registration	Check (✓) One	
				Examination	Reciprocity

DRIVING EXPERIENCE:

Years experience as a driver: Pleasure car ____________ Others (describe) ______________________

Do you have a current driver's license? Yes ☐ No ☐ If yes, name of state issuing ______________ License No. __________

Has your driver's license ever been suspended or revoked? Yes ☐ No ☐ If yes, give reason ______________________

GENERAL INFORMATION

1. If you are a naturalized citizen of the United States, answer the following:

(a) Name of court ______________________ Address ______________________

(b) Certificate No. ______________________ Date ______________________, 19______

2. Have you ever been convicted of a felony? Yes ☐ No ☐ If yes, attach a report. NOTE: A "yes" answer to this question will not necessarily bar you from employment. The nature, severity, and date of the offense in relation to the position for which you are applying are considered.

3. Have you ever been discharged for misconduct or unsatisfactory service or forced to resign from any employment? Yes ☐ No ☐ If yes, attach a statement giving name and address of employer and the reason for discharge or forced resignation in each case.

4. Have you ever been employed by the State Highway Department? Yes ☐ No ☐

(a) If "Yes", between what dates ______________________ to ______________________

(1) Where assigned? ______________________ Position Title ______________________

(2) Reason for leaving ____

5. Are you a member of the S. C. Retirement System? Yes ☐ No ☐ If "Yes", what is your Active Register Number ______________________

- -

EEO REPORTING AND PERSONNEL RESEARCH Your Social Security Number ☐☐☐☐☐☐☐☐☐

Note: The information requested in this section is not used to evaluate your application. This information is needed to satisfy Equal Employment Opportunity reporting and personnel research requirements.

Name: Last ______ First ______ Middle ______ Today's Date: Mo. ______ Day ______ Year ______

Check one: 1. ☐ Former State of S. C. Employee 2. ☐ Present State of S. C. Employee 3. ☐ Never Employed by State of S. C.

Race (check one): A ☐ American Indian N ☐ Black S ☐ Spanish American W ☐ White O ☐ Oriental M ☐ Other (specify) ______

Sex: F ☐ Female M ☐ Male Marital Status: S ☐ Single M ☐ Married D ☐ Divorced A ☐ Separated W ☐ Widowed

Number of Children ______ How long have you lived in S. C.? ______ Position(s) applied for ______________________

REFERENCES

Give names and addresses of three persons, not relatives or former employers, who have known you for over a year.

Name ______________________ Address______________________ Occupation ____________

Name ______________________ Address______________________ Occupation ____________

Name ______________________ Address______________________ Occupation ____________

ORGANIZATION MEMBERSHIPS

List below all membership associations and organizations in which you are active or hold honorary membership (If none, write the word "None" on first line)

Name	Address

I certify that the foregoing statements and answers are true and correct and it is understood and agreed that any misrepresentation by me in this application will be sufficient cause for cancellation of this application and/or separation from service if I have already been employed.

Date ______________________, 19______ ______________________________

Signature of Applicant

DO NOT WRITE IN SPACE BELOW

INTERVIEWER'S IMPRESSIONS

	Excellent	Good	Fair	Poor
General Appearance				
Dress				
Personality				
Speech				
Intelligence				
Ambitions				

REMARKS: In my opinion, applicant meets the minimum qualifications for the position of ______________________

____

Date ______________________, 19______ ______________________________

Signature of Interviewer

COMPANY

APPLICATION FOR EMPLOYMENT

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

the future

APPLICATION FOR EMPLOYMENT

Please Print In Ink Or Type And Complete All Applicable Sections, Even If Resume is Included

Name — Last, First, Middle

Social Sec. No.

Present Mailing Address — No. & Street, P.O. Box, Rt. #, City, State, Zip Code, ( ) Telephone No.

Home Mailing Address (If Different From Above) — No. & Street, P.O. Box, Rt. #, City, State, Zip Code, ( ) Telephone No

Weekday Telephone Number ( )

Position or Type of Work Desired

Salary Expected $ Hr., Wk., Mo., Yr. Will You Consider A Position That Pays Less Than The Expected Amount Listed? ☐ Yes ☐ No

Date Available Do you Have Any Geographical Restrictions? ☐ Yes ☐ No If Yes, Where?

Have You Previously Applied For Employment With Company? ☐ Yes ☐ No If Yes, When?

Where? Have You Previously Been Employed By Co.? ☐ Yes ☐ No

If Yes When? Where?

In Emergency, Notify: (Name) Telephone No. ( )

Have You Ever Been Convicted Of A Crime? (Include Military Convictions) ☐ Yes ☐ No If Yes, Explain (Use Separate Paper, If Necessary).

EDUCATION

Name of School	Dates Attended	Date Graduated Or Expect To Graduate	Certificate/ Diploma/Degree (If Applicable)	Major (If Applicable)
High School/Equivalent Training				
Location				
Technical or Business				
Location				
College or University				
Location				
College or University				
Location				
Graduate School				
Location				
Armed Services, Correspondence				
Location				

MILITARY

Branch of Service Date Inducted And Rank

Date Discharged and Rank

Type Of Discharge If Other Than "Honorable," Explain

Primary Military Occupation

EMPLOYMENT

Beginning With The Most Recent, List Below The NAMES & ADDRESSES Of All Your Employers, Including Military If Applicable	Dates Employed				Salary At Leaving	Position or Type Of Work Performed	Department/ Supervisor	Reasons For Leaving
	From		To					
	Mo.	Year	Mo.	Year				
Company								
Address								
Company								
Address								
Company								
Address								
Company								
Address								
Company								
Address								
Company								
Address								

OTHER TRAINING AND SKILLS

Please Supply The Following Information If It Relates To Position(s) Or Type Of Work For Which Applied:

Typing Speed ____________ WPM   Shorthand Speed ____________ WPM

Dictating Equipment Skills ☐ Yes ☐ No   Driver's License No. ____________________ State ____________

Please Provide Any Additional Information That May Aid Us In The Consideration Of Your Application Including Special Skills, Training, Qualifications, Membership In Professional Societies, Etc.

____

____

____

I UNDERSTAND THAT the completion of this application does not indicate there are open positions and does not obligate Company in any way. If accepted, employment in the position offered will be subject to a determination of physical and mental capability by a physician approved by the Company in accordance with the provisions of the Company's Affirmative Action Plan for the Handicapped.

I FURTHER UNDERSTAND THAT this application will be retained for active consideration for sixty (60) days from date submitted; however, I may reactivate my application for additional 60-day periods upon proper notification to the Company.

I HEREBY CERTIFY THAT my answer to each of the previous questions is true.

I AUTHORIZE the procurement of all available information from past and present employers and other applicable sources and realize that any evidence of falsification of information on this application may be considered adequate cause for discharge.

If the position for which you will be considered requires a security clearance, your offer of employment will be contingent upon receipt of this clearance. Public Law 91-508 requires that we advise you that a routine inquiry may be made which will provide applicable information concerning character, general reputation, personal characteristics and mode of living. Further information on the nature and scope of such report, if made, will be made available to you upon written request.

All information required in this form is necessary to process your application properly and to enable the Company to comply with state and federal laws and regulations.

Applicant's Signature ______________________________ Date Submitted ______________

INVITATION TO APPLICANTS

I. Handicapped

is a government contractor subject to Section 503 of the Rehabilitation Act of 1973. In accordance with this law, it is a company goal to take affirmative action to employ and advance in employment qualified handicapped individuals. A handicapped individual is defined as a person having: (1) a physical or mental impairment which limits one or more life functions, (2) a record or history of such an impairment, or (3) is regarded as having such an impairment. If you have a handicap and would like to be considered under the Affirmative Action Program, please tell us. Submission of this information is voluntary and refusal to provide it will not subject you to discharge or disciplinary treatment. Information obtained concerning individuals shall be kept confidential, except that (i) supervisors and managers may be informed regarding restrictions on the work or duties of handicapped individuals, and regarding necessary accommodations, (ii) first aid and safety personnel may be informed, when and to the extent appropriate, if the condition might require emergency treatment, and (iii) government officials investigating compliance with the Act shall be informed.

If you are handicapped, we would like to include you under the Affirmative Action Program. It would assist us if you tell us about (1) any special methods, skills and procedures which qualify you for positions that you might not otherwise be able to do because of your handicap, so that you will be considered for any positions of that kind, and (2) the accommodations which we could make which would enable you to perform the job properly and safely, including special equipment, changes in the physical layout of the job, elimination of certain duties relating to the job, or other accommodations.

II. Disabled Veterans and Veterans of the Vietnam Era.

is also a government contractor subject to Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974 as ammended which requires government contractors to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam Era. A disabled veteran is a person entitled to at least 30 percentum disability compensation under laws administered by the Veterans Administration or whose discharge from active duty was for disability incurred or aggravated in the line of duty. Veteran of the Vietnam Era means a person (1) who (i) served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964 and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge, or (ii) was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964 and May 7, 1975. If you are a disabled veteran covered by this program and would like to be considered under the Affirmative Action Program please tell us. This information is voluntary and refusal to provide it will not subject you to discharge or disciplinary treatment. Information obtained concerning individuals shall be kept confidential, except that (i) supervisors and managers may be informed regarding restrictions on the work or duties of disabled veterans, and regarding necessary accommodations, and (ii) first aid personnel may be informed, when and to the extent appropriate, if the condition might require emergency treatment. In order to assure proper placement of all employees, we request that you respond to the following statement:

If you have a disability which might affect your performance or create a hazard to yourself or others in connection with the job for which you are applying, please state the following: (1) the skills and procedures you use or intend to use to perform the job notwithstanding the disability and (2) the accommodations we could make which would enable you to perform the job properly and safely, including special equipment, changes in the physical layout of the job, elimination of certain duties relating to the job or other accommodations.

……

NOTE: Please complete page 4 of this form if you wish to be included in the Affirmative Action Program(s) described above.

NOTE: COMPLETION OF THIS PAGE IS VOLUNTARY; DO NOT COMPLETE UNTIL YOU HAVE READ PAGE 3 THOROUGHLY.

I am ☐ handicapped ☐ a disabled veteran ☐ a Vietnam Era Veteran and would like to be included in your Affirmative Action Program.

My Handicap/Disability is: ____

____

Recommendations for accommodations are indicated below.

____

____

____

____

____

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

(TO BE DETACHED BY AUTHORIZED COMPANY REPRESENTATIVE)

(TO BE DETACHED BY AUTHORIZED COMPANY REPRESENTATIVE)

COMPANY

Federal laws and regulations require employers to monitor and report the status of their equal employment opportunity and affirmative action programs on a continuing basis. Therefore, it is requested that you complete the information below. This information will be maintained only for the purpose of monitoring and reporting compliance in accordance with applicable laws and regulations as well as to insure compliance with Company policies and procedures and will not be used for any other purpose.

Name ____________________ Address ____________________ Social Security No. ____________

☐ Male ☐ Female Date of Birth ________ / ________ / ________
Month Day Year

Are you a United States Citizen or Permanent Resident of the United States or otherwise eligible for full-time permanent employment in the United States?
☐ Yes ☐ No

ETHNIC IDENTIFICATION: ☐ White ☐ Black ☐ Hispanic ☐ Asian or Pacific Islander ☐ American Indian or Alaskan Native

Do you have any relatives currently employed by ☐ Yes ☐ No

If so, give Name(s) ____________	Relationship(s) ____________	Department(s) ____________ 108
107 ____________	____________	____________
____________	____________	____________

Signature ______________________________ Date ____________

UNIT VI--LIFE SKILLS

EARNINGS

Career Choice ______________________________

Hours worked per period ____________

Hourly rate ____________

Pay period earnings (gross) ____________

Monthly earnings (gross earnings)

  (multiply weekly earnings by 4) ____________

  (multiply bi-weekly earnings by 2) ____________

Deductions (per pay period)

  Federal income tax ____________

  State income tax ____________

  FICA (social security) ____________

  Pay period total ____________

  Monthly total ____________

Net Income (per pay period) ____________

  per month ____________

Housing (own or rent)

  (estimated monthly payment) ____________

Car (estimated monthly payment) ____________

Utilities (estimated monthly expense)

  electricity ____________

  telephone ____________

  water ____________

  other ____________

  Total utilities ____________

Food and clothing (estimated monthly expense) ____________

Insurance (estimated monthly cost)

health ____________________

life ____________________

car ____________________

other ____________________

Total insurance ____________________

Gas Expense (estimated monthly amount) ____________________

Savings/Retirement plan

(estimated monthly expense) ____________________

Medical Expenses (estimated monthly amount) ____________________

Emergency Expenses

(estimated monthly amount) ____________________

Family-related Expenses

(estimated monthly amount) ____________________

Total Monthly Expenses ____________________

Left-over amount

Net Pay - Total Expenses ____________________

UNIT VII--FINANCING A COLLEGE EDUCATION

FINANCIAL AID

SCOIS FINANCIAL AID INDEX

The SCOIS Financial Aid File provides information on major financial and programs available to students in South Carolina to meet the costs of post-secondary education. Following are the school codes for accessing financial aid information on specific schools in South Carolina.

School Code

01	Aiken Technical College
02	Allen University
03	Anderson College
04	Baptist College
05	Beaufort Technical College
06	Benedict College
07	Bob Jones University
08	Central Wesleyan College
09	Chesterfield-Marlboro Technical College
10	The Citadel
11	Claflin College
12	Clemson University
13	Clinton Junior College
14	Coker College
15	College of Charleston
16	Columbia Bible College
17	Columbia College
18	Columbia Junior College
19	Converse College
20	Denmark Technical College
21	Erskine College
22	Florence-Darlington Technical College
23	Francis Marion College
24	Furman University
25	Greenville Technical College
26	Horry-Georgetown Technical College
27	Lander College
28	Limestone College
29	Medical University of S.C.
30	Midlands Technical College
31	Morris College
32	Newberry College
33	Nielson Electronic Institute
34	North Greenville College
35	Orangeburg-Calhoun Technical College
36	Piedmont Technical College
37	Presbyterian College
38	Rutledge College — Columbia
39	Rutledge College — Greenville
40	Rutledge College — N. Charleston
41	Rutledge College — Spartanburg
42	Sherman College
43	South Carolina State College
44	Southern Methodist College
45	Spartanburg Methodist College
46	Spartanburg Technical College
47	Sumter Area Technical College
48	Tri-County Technical College
49	Trident Technical College
50	U.S.C. — Aiken
51	U.S.C. — Beaufort
52	U.S.C. — Coastal Carolina
53	U.S.C. — Columbia
54	U.S.C. — Lancaster
55	U.S.C. — Salkehatchie
56	U.S.C. — Spartanburg
57	U.S.C. — Sumter
58	U.S.C. — Union
59	Voorhees College
60	Williamsburg Technical College
61	Winthrop College
62	Wofford College
63	York Technical College

FREQUENTLY ASKED QUESTIONS ABOUT FINAINCIAL AID

Q: What is financial aid?

A: Financial aid is help in meeting educational expenses. It can apply to both direct educational cost (tuition, fees, and books) as well as to personal living expenses (food, housing, transportation).

Q: Is financial aid available only to those with very low incomes?

A: No, but you do have to show that you need it in order to qualify for federal and most state assistance. Some scholarships and grants are based on criteria other than or in addition to need, such as academic performance, special talents, or proposed field of study.

Q: How much aid can I get?

A: Students are usually eligible for aid equal to the amount of their demonstrated financial need. The difference between college costs and what a family can afford to pay equals demonstrated financial need. What a family can afford to pay is determined by evaluating a family's income and assets according to a nationally accepted formula.

Q: What is a Financial Aid Form (FAF) or Family Financial Statement (FFS)?

A: The FAF or FFS is a form on which you submit your family's financial information. It is used to determine financial need. Look at specific school information for the school you plan to attend to see which form to use and when it is due. Your college financial aid office or high school guidance office can provide these forms.

Q: Should I apply to more than one financial aid program?

A: Yes, most counselors and financial aid officers encourage students to apply for more than one financial aid program. however, to prevent unnecessary frustration, learn as much as you can about the various programs and then apply only for those for which you appear to qualify.

Q: How often should I re-apply for aid?

A: Most programs require that you re-apply each year since eligibility decisions must be based upon current family financial information.

Q: Where can I get more financial aid information?

A: Your college financial aid office is the best single source of information. Your high school guidance office can also assist you. Additionally, you should: make inquiries in your community, check your local newspaper, and visit your local library.

An important consideration in choosing a school for postsecondary training is cost. High cost should not prevent you from selecting a particular school, however, since financial assistance may be available.

But keep in mind--financial aid is meant to 'assist' in meeting educational expenses. you will be expected to contribute some of the necessary resources, according to your means.

To find the approximate cost for tuition and fees and room and board, look at the school of your choice in the coin postsecondary school file. Estimated costs for training in private vocational schools in South Carolina can be found in the SCOIS Private Vocational Schools (PVS) file. Don't forget to include personal expenses in your estimate of total costs.

How will you meet these expenses? Follow these 4 suggested steps to financial aid:

1. Talk with your parents---

   about how much they can contribute to your education. Since most financial aid programs are based on need, you and your family will be expected to contribute as much as you can to your educational expenses. Never assume your family's income is too high to qualify for aid.

2. Consult your guidance counselor---

   early in your senior year, or even earlier, about your plans for education beyond high school and your need for financial assistance.

3. Most important: contact the financial aid office---

   at each school you are considering to get information and financial aid forms. Financial aid programs, financial aid forms, and application deadlines may differ from one institution to the other. this step should be taken during the fall semester of your senior year or even earlier.

4. Submit financial aid applications---

   and other required forms before stated deadlines. Applications for financial aid must be made in addition to application for admission. Important: you must apply for financial aid to get it.

TYPES OF AID

A college education requires not only a commitment of time, but also, a major investment of money. Initial costs include tuition, room and board, and fees. Also, books and supplies, transportation, and personal expenses such as laundry, clothing and grooming aids must be considered. You and your family should carefully plan how these expenses will be paid. If your family is unable to bear the full costs, financial aid may be available.

There are four general types of financial aid: scholarships, grants, loans, and employment programs. Many students receive a combination of these types of financial aid. Most aid offices will first determine your eligibiliy for grants or scholarships before exploring loans or student work.

Following is a general description for the four basic types of financial aid:

Scholarships

Scholarships do not have to be repaid. some scholarships are based on need, while others may not consider need. Many scholarships are based on merit and take into account such factors as grades and college board test scores. Some scholarships are given to students in a particular field of study or for special talents or abilities, such as athletics, music, art, etc.

Grants

Grants are gifts which do not require repayment and are usually based on financial need alone. The most widely used grants are federal or state sponsored.

Employment

Through the student employment programs, students are provided part-time jobs so that they can earn money to help pay for educational expenses. Usually, students are not permitted to work more than 20 hours per week during the academic year. Although the largest student employment program, college work-study, is based on financial need, there are programs which do not require students to demonstrate financial need.

Educational loans

Educational loans require repayment and are sometimes based on financial need. They are usually subsidized by the state or federal government or by colleges themselves.

MAJOR FEDERAL PROGRAMS

Pell Grants

The Pell Grant program is the largest need-based federal student aid program. Pell Grant eligibility is determined by the U. S. Department of Education. Most schools require students to apply for a Pell Grant before they can be considered for other sources of aid administered by the school. Since this is a grant, the award does not have to be repaid.

Who is eligible?	U. S. Citizens or permanent residents admitted or enrolled in at least half-time study in an undergraduate program in an eligible institution.
How are awards made?	Based upon demonstrated financial need as determined by a national formula, and the cost of education at your school.
Award amounts?	Limited to demonstrated need up to present maximum of $2200 per year (1989-1990).
Application located?	High school guidance offices or college financial aid offices.
Application deadline?	It is best to apply as early as possibe for the 1988-89 year, since most other aid is not awarded until pell grant eligibility is determined.

Carl D. Perkins/National Direct Student Loan (NDSL)

The Carl D. Perkins/National Direct Student Loan is one three federal campus-based financial aid programs. Campus-based means that participating schools distribute money supplied by the U. S. Department of Education to students who demonstrate need. The loan is interest free as long as the student is enrolled at least half-time. The total amount borrowed plus 5% interest must be repaid after the student graduates or leaves school.

Who is eligible?	U. S. citizens or permanent residents admitted or enrolled in at least half-time study in an undergraduate or graduate program in a participating institution.
How are awards made?	Based upon demonstrated financial need. Awarded by college financial aid office.
Award amounts?	Depending on your need, the availability of Perkins Loan funds at your school, and the amount of other aid you are receiving, you may borrow up to: -$4,500 if you are enrolled in a vocational program, or if you have completed less than two years of a program leading to a bachelor'S degree. -$9,000 if you are an undergraduate student who has already completed 2 years of study toward a bachelor's degree and has achieved third year status (this total includes any amount you borrowed under ndsl for your first 2 years of study). -$18,000 for graduate or professional study (this includes any amount borrowed under ndsl for undergraduate study).
APPLICATION LOCATED?	College Financial aid office.
APPLICATION DEADLINE?	Varies with individual schools. check with school.

Supplemental Educational Opportunity Grant (SEOG)

The Supplemental Educational Opportunity Grant program (SEOG) is one of three federal campus-based financial aid programs. Campus-based means that participating schools distribute money supplied by the U. S. Department of Education to students who demonstrate need. Since this is a grant, the award does not have to be repaid.

Who is eligible?	U. S. citizen or permanent resident admitted or enrolled in at least half-time study in an undergraduate program in a participating institution.
How are awards made?	Based upon financial need. Awarded by college financial aid office.
Award amounts?	Limited to $4000 per year or half of financial need.
Application located?	College financial aid office.
Application deadline?	Varies with individual schools. Check with school.

College Work-Study (CWS)

The College Work-study program (CWS) is one of three federal campus-based financial aid programs. Campus-based means that participating schools distribute money supplied by the U. S. Department of Education to students who demonstrate need. This program provides jobs so that students can earn money to help pay educational expenses. Students are usually employed on campus.

Who is eligible?	U. S. citizen or permanent resident admitted or enrolled in full-time study in under-graduate or graduate program in a participating institution.
How are awards made?	Based upon demonstrated financial need. Awarded by college financial aid office.
Award amounts?	Limited to need. Pay will be at least current current federal minimum wage.
Application located?	College financial aid office.
Application deadline?	Varies with individual schools. Check with school.

State Student Incentive Grant (SSIG)

The State Student Incentive Grant program (SSIG) is a federal financial aid program which bases awards on substantial financial need. While SSIG is a federal program, it requires substantial state funding and is administered by each state which participates. Since this is a grant, the award does not have to be repaid.

Who is eligible?	U. S. citizen or permanent resident in a full-time undergraduate program at a participating institution in South Carolina.
How are awards made?	Based upon substantial financial need. Award is responsibility of designated state agency, but is initiated at college financial aid office.
Award amounts?	Limited to need. Cost of tuition and fees or $2,000 whichever is less.
Application located?	College financial aid office.
Application deadline?	Varies with individual schools. Check with school.

Paul Douglas Teacher Scholarship

The Paul Douglas Teacher Scholarship is a Federal financial aid program for undergraduate students who plan to teach. This scholarship is based on academic excellence; not financial need.

Who is eligible?	Undergraduate students who are enrolled in a recognized teacher education program in-State or out-of-state and who graduated in the top 10% of their high school graduating class. Scholarship must be repaid if the recipient does not enter the teaching profession.
How are awards made?	Not based on financial need. Based on academic excellence and awarded by a committee selected by the State Superintendent of Education.
Award amounts?	Up to $5000 per year for not more than 4 years.
Application located?	College Financial Aid Offices or South Carolina Student Loan Corporation Interstate Center, Suite 210 P. O. Box 21487 Columbia, S. C. 29221
Application deadline?	Varies with individual school. Check with school.

Robert C. Byrd Honors Scholarship

The Robert C. Byrd Honors Scholarship is a Federal Financial Aid Program which bases awards on academic excellence.

Who is eligible?	Graduating High School seniors attending either a public or private high school who plan to enroll immediately after graduation in a two or four-year institution.
How are awards made?	Not based on financial need. Based on academic excellence and awarded by a committee selected by the State Superintendent of Education.
Award amounts?	A one time award of $1500, funds permitting.
Application located?	High school counselor or principal office.
Application deadline?	Varies with individual schools. Check with school.

MAJOR STATE PROGRAMS

STAFFORD LOAN/GUARANTEED STUDENT LOAN (GSL)

The Guaranteed Student Loan program (GSL) permits students to borrow money for educational expenses from private sources. In South Carolina, the program is administered by the South Carolina Student Loan Corporation. Payment is not required on principal or interest until the student graduates or leaves school. The U. S. Secretary of Education pays the interest until the student begins repayment. For new borrowers repayment of principal and 8% interest begins 6 months after the student leaves school.

Who is eligible?	U. S. citizens or 'permanent residents' admitted or enrolled in at least half-time study in either an in-state or out-of-staate institution.
How are awards made?	Based upon demonstrated financial need.
What are awards amounts?	$2,625 for each of the first 2 years of study, up to $4,000 per year for undergraduate study beyond the first two years. Graduate students may borrow up to $7,500 for each year of study.
Application located?	College financial aid office.
Application deadline?	Students are encouraged to apply as early as possible, however, there are no fixed deadlines.

Plus Loan

Under the Plus Loan program parents, independent students, or graduate professional students can borrow funds to help pay for educational expenses. In South Carolina the program is administered by the South Carolina Student loan corporation. Plus loans are not based on financila need, but, a good rating is necessary for approval of the loan request. The interest rate for Plus loans is variable but will not exceed 10.45%. A borrower must begin repaying a Plus loan within 60 days from the date the check is issued, but may have up to 10 years to pay off the balance.

Who is eligible?	U. S. citizen, resident of S.C., who is a parent of a dependent undergraduate student enrolled in good academic standing in an eligible post-secondary school on a full-time basis; independent undergraduate students; or graduate professional student.
How are awards made?	Not based on financial need. Awarded by the S.C. Student Loan Association.
What are award amounts?	Parents loans - limited to college expences minus any other financial aid received, or $4000 whichever is less. Independent Student Loan - $4,000 per academic year inclusive of any amount borrowed through the GSL program. Graduate Professional Student Loans - $4,000 per academic year, exclusive of any amount borrowed through the GSL program.
Application located?	College financial aid office or S.C. Student Loan Corporation Interstate Center, Suite 210 P.O. Box 21487 Columbia, S.C. 29221
Application deadline?	Recommended that applications be received at least 45 days prior to the beginning of the school term.

State Student Incentive Grant Program (SSIG)

See major federal programs.

South Carolina Teacher Loan Program

The Teacher Loan Program is a state financial aid program for students who plan to teach school.

Who is eligible?	Residents of South Carolina who are planning to teach in certain geographic areas or to teach math or science on the secondary school level, enrolled in a teacher education program in-State or out of-state and meet academic standards.
How are awards made?	Awarded by the South Carolina Student Loan Corporation.
What are award amounts?	$2,625 for each of the first 2 years of study, up to $4,000 per year for undergraduate study beyond the first 2 years. Graduate students may borrow up to $7,500 for each year of study.
Application location?	College financial aid office.
Application Deadline?	Varies

Palmetto Fellows Scholarship

The Palmetto Fellows Scholarship is a state program which bases awards on academic excellence. The scholarship is awarded to high school students who have attained an established qualifying score on the PSAT, and plan to attend an in-state institution.

Who is eligible?	Residents of South Carolina who attain the qualifying PSAT score.
How are awards made?	Awarded by the S.C. Commission on Higher Education.
What are award amounts?	Up to $5,000 per year, half provided by the State and half by the participating institution. Awards are renewable for three (3) years assuming specific academic criteria are met.
Application location?	High school counselor or principle office.
Application deadline?	Check with high school counselor.

South Carolina National Guard Tuition Assistance

The South Carolina National Guard Tuition Assistance program offers grants for educational expenses to members of the S. C. National Guard or Air National Guard. Grants are limited to $500 per year for a maximum of 4 years participation. This grant is not based on financial need. First priority to receive grants are those already in the program on a continuing basis. Second priority goes to recruits in the guard who have just signed up. Next priority goes to those who extend their stay in the guard. A person already receiving a full scholarship would not qualify for assistance.

Who is eligible?	Resident of South Carolina. Member of the S. C. National Guard, attending any in-state institution approved by the state department of education.
How are awards made?	Not based on financial need. Awarded by the Adjutant General of S.C. or his representative.
What are award amounts?	Up to $500 per year, maximum of 4 years.
Application located?	Local national guard armory or: Adjutant General of S. C. Rembert C. Dennis Building 1000 Assembly Street Columbia, S.C 29201
Application deadline?	None

Vocational Rehabilitation Benefits

The Vocational Rehabilitation Benefits Program is a state financial aid program which helps handicapped students meet the cost of education or job training after high school.

Who is eligible?	Resident of South Carolina who has a physical or mental handicap that limits ability to work.
How are awards made?	Based upon financial need. Awarded by Vocational Rehabilitation Department.
What are award amounts?	Up to $2000 maximum per year for educational fees. Additional funds for special services.
Application located?	Nearest Vocational Rehabilitation office.
Application deadline?	Varies

HEALTH PROFESSIONS STUDENT LOANS

The Health Professions Student Loan Program is a federal financial aid program which provides loans based upon demonstrated financial need to pharmacy, medical, veterinary, optometry, dentistry, osteopathy and podiatry students.

Who is eligible?	U.S. citizens or 'permanent residents' enrolled in at leat half-time study in an undergraduate or graduate nursing program.
How are awards made?	Based upon demonstrated financial need. Awarded by college financial aid office.
Award Amounts?	Up to $2,500 plus the cost of tuition per year.
Application located?	College financial aid office.
Application deadline?	Varies.

Nursing Student Loans

The Nursing Student Loan program is a federal financial aid program which provides loans based upon demonstrated financial need to nursing students.

Who is eligible?	U. S. citizens or 'permanent residents' enrolled in at least half-time study in an undergraduate or graduate nursing program.
How are awards made?	Based upon demonstrated financial need. Awarded by college financial aid office.
What are award amounts?	Limited to $2500 per year or amount of need.
Application located?	College financial aid office.
Application deadline?	Varies

War Orphans Benefits

The War Orphans Benefits program is a federal program designed to offer financial aid assistance to dependents of deceased or disabled veterans.

Who is eligible?	Son or daughter up to 23 years of age, of deceased disabled veteran of U. S. armed services.
How are awards made?	Not based on financial need. Awarded by the veterans administration.
What are award amounts?	Varies, depending upon whether death or disability was service connected.
Application located?	Nearest veterans administration office.
Application deadline?	Varies

Free Tuition - Children of Deceased or Disabled South Carolina Firemen, Law Officers, and Members of Civil Air Patrol or Organized Rescue Squad

Free tuition is available for children of deceased or disabled South Carolina firemen, law officers, and members of civil air patrol or organized rescue squads to attend South Carolina state supported colleges and universities. This program does not provide payment for room and board, certain fees, or books.

Who is eligible?	Child of a deceased or totally disabled S.C. fireman, law officer, or member of civil air patrol or organized rescue squad.
How are awards made?	Not based on financial need. Approved by public institution attended, on basis of evidence of death or disability in line of duty.
What are award amounts?	Limited to tuition cost at state supported postsecondary institutions attended.
Application located?	College financial aid office, or governing body of institution attended.
Application deadline?	Prior to beginning of school term.

South Carolina tuition grants are funds awarded to South Carolina residents who attend a South Carolina independent (private) college. Tuition grants are awarded on the basis of financial need and academic merit. Freshman applicants must rank in the upper three-fourths of their high school class or score 800 or above on the Scholastic Aptitude Test (SAT). Applicants must also apply for a Pell Grant. Since this is a grant, funds do not have to be repaid.

Who is eligible?	Resident of South Carolina accepted for full-time enrollment in eligible private institutions in the state. Military applicant must be stationed in S.C. for one year.
How are awards made?	Based upon financial need and academic merit.
Award amounts?	The maximum grant varies, based upon family resources and the cost of the institution selected. Although not everyone qualifies, grants may range up to $3,320 per year.
Application located?	High school guidance offices, college financial aid offices or Tuition Grants Committee 411 Keenan Building P. O. Box 12159 Columbia, S.C. 29211
Application deadline?	As soon as possible after January 1 of the year you plan to attend. Funds run out quickly, so early application is important.

Free Tuition

The South Carolina veteran's children free tuition program is a state financial aid program. The program provides free tuition in South Carolina state supported colleges and universities to children of deceased or totally disabled war veterans. The program does not provide payment for room and board, certain fees, or books.

Who is eligible?	Child of deceased or totally disabled war veteran.
How are awards made?	Not based on financial need. Approved by S.C. Department of Veterans Affairs which notifies the institution.
What are award amounts?	Limited to tuition cost at state supported postsecondary institutions attended.
Application located?	S.C. Department of Veterans Affairs Edgar Brown Building 1205 Pendleton Street Columbia, S.C 29201
Application deadline?	Prior to beginning of school term.

OTHER SOURCES

Business

Many businesses, especially large corporations, provide financial aid for educational expenses. Financial aid is often provided to employees and sometimes to sons and daughters of employees.

The College Army Fund

This is a college savings plan for qualified enlistees in the U. S. Army. For every dollar contributed to the plan, the government puts in five. contact your local Army representative for more details.

Labor Unions

Financial aid programs are usually designed for sons and daughters of members.

Local Church

Available awards are usually limited to members of the congregation and their dependents.

National Church Organizations

Through national headquarters, some denominations establish scholarships and/or loans to assist qualified members of the denomination.

Foundation

Awards may be restricted to students in certain areas of study or to students with very strong academic records. Aid is sometimes limited to students from particular towns or counties.

Academic Scholarships

Many colleges offer academic scholarships to students with a B average and SAT scores of 900 or more. Many of these scholarships are not based on financial need.

Athletic Scholarships

Many colleges offer athletic scholarships to talented students in a wide range of sports - football, baseball, basketball, tennis, soccer, swimming, and golf - to name a few.

The National Merit Scholarship Program

This is a large, private financial aid program. Grants are awarded to students with outstanding academic ability as demonstrated on the preliminary scholastic aptitude test / national merit scholarship qualifying test examinations taken during the junior year of high school.

Reserve Officer Training Corps (ROTC) Scholarships

Financial aid to ROTC recruits can range anywhere from a $100 monthly subsistence allowance in the junior and senior year to all tuition fees and textbooks, plus $100 a month allowance.

Educational Institutions

Many colleges provide loans from their own resources. Ask the financial aid director at the institution you wish to attend about these programs.

Special Interest Organizations

Civic clubs, historical association, fraternal organizations, and military-related groups may sponsor scholarships and/or loan programs, often related to their special interests.

Special Fields of Study

Financial aid is often available to students in special fields of study. For example, hospitals often provide assistance to students in nursing programs.

Additional Information

Contact your school guidance counselor or college financial aid office for additonal information. besides administering most federally-funded programs many college financial aid offices also administer many state and even privately-funded financial aid programs.

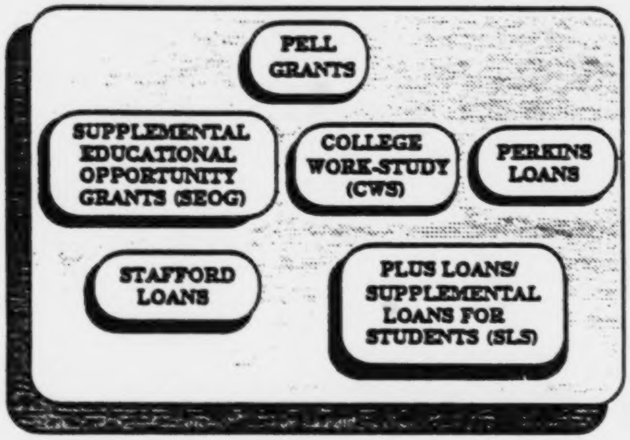
FEDERAL STUDENT AID FACT SHEET
1990-91

Published by the U.S. Department of Education

This *Fact Sheet* offers some information about Federal student aid for students who want education or training beyond high school. But the *Fact Sheet* can't cover everything you need to know. For more information, contact the financial aid administrator at the school(s) you want to attend. You should also check your local public library for additional sources of financial aid.

GENERAL INFORMATION

The U.S. Department of Education offers the following major student financial aid programs:


PELL GRANTS
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG)
COLLEGE WORK-STUDY (CWS)
PERKINS LOANS
STAFFORD LOANS
PLUS LOANS/ SUPPLEMENTAL LOANS FOR STUDENTS (SLS)

Grants are financial aid you don't have to pay back. Work-Study gives you the chance to work and earn money to help pay for school. Loans are borrowed money that you must repay with interest.

Eligibility Requirements

To be eligible to receive aid, a student must meet the following requirements:

- Generally, have financial need.
- Have a high school diploma, a GED, or demonstrate the ability to benefit from the program or training offered. See your financial aid administrator for more information.
- Be enrolled as a regular student in an eligible program. A regular student is one who is enrolled in an institution to obtain a degree or certificate. An eligible program is a course of study that leads to a degree or certificate at a school that participates in one or more of the student aid programs described in this *Fact Sheet*.
- Be enrolled at least half-time*—except for the campus-based programs (see page 6).
- Be a U.S. citizen or eligible non-citizen. Check with your financial aid administrator for catego of "eligible non-citizen."
- Make satisfactory academic progress.*
- Sign a statement of educational purpose/ certification statement on refunds and default.*
- Sign an Anti-Drug Abuse Act Certification.*
- Sign a statement of updated information.*
- Sign a statement of registration status.*

Financial Need

Aid from most of the Federal student aid programs discussed in this *Fact Sheet*—except for PLUS and SLS loans (see page 10)—is awarded on the basis of financial need. The amount of aid you receive if you meet the eligibility requirements listed on this page depends on whether you and your family are considered to have financial need.

The information you report on an aid application (see "Applying," page 2) is used in the formulas that calculate your need and eligibility.

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*See "Important Terms," pages 11 to 12, for a definition of this term.

mined by a formula and depends on a number called the "Pell Grant Index (PGI)." If this number is low enough, you're eligible for a Pell Grant. And the lower the number, the larger your award will be. If your PGI is higher than a certain number, you're not eligible. For more information on Pell Grants, see page 5.

There isn't a minimum or maximum number in determining eligibility for the "campus-based" and Stafford Loan programs (see pages 6 and 8 for information on these programs). Instead, your financial need is determined by the following subtraction:

COST OF EDUCATION
— FAMILY CONTRIBUTION (FC)
=FINANCIAL NEED

COST OF EDUCATION—your educational expenses such as tuition, fees, room, board, books, supplies, transportation, child care, costs related to a handicap, and miscellaneous expenses.

FAMILY CONTRIBUTION (FC)—the amount you and your family are expected to pay toward your education. This amount is determined by a standard formula somewhat different from that used for the Pell Grant Program. However, as is true for the Pell Grant Program, factors such as taxable and non-taxable income, assets (such as savings and the value of a home), and benefits (for example, unemployment or Social Security) are all considered in the calculation. You can get a booklet describing the FC formula in detail by writing to—Congressional Methodology, Department M-11, Pueblo, Colorado 81009-0015.

Note that although need is determined by formula, the financial aid administrator can adjust—up or down—your Family Contribution (FC) or your cost of education, if he or she believes your family's financial circumstances warrant it. However, the aid administrator does not *have* to make such an adjustment. For more information on adjustments, see "Special Circumstances," page 3, or contact your financial aid administrator.

Applying

You can use any one of a number of forms if you'll be applying for need-based Federal student aid *other than* a Pell Grant. Check with your school to find out which form to use. However, if you want to be considered for a Pell Grant as well, you must use one of the six forms listed in the next column. Your school may specify which of these forms you should complete if you also want to be considered for aid from **non-Federal** sources. You can get the application you need from your school.

The following four forms are free:

- The U.S Department of Education's "Application for Federal Student Aid" (AFSA)

- The Pennsylvania Higher Education Assistance Agency's (PHEAA's) "Application for Pennsylvania State Grant and Federal Student Aid"

- CSX Technology's "Application for Federal and State Student Aid (AFSSA)"

- United Student Aid Funds' (USAF's) "Singlefile Form"

The two forms listed below collect extra information used in applying for non-Federal aid and charge for processing that information:

- The American College Testing Program's "Family Financial Statement" (FFS)

- The College Scholarship Service's "Financial Aid Form" (FAF)

If you apply using a form other than the U.S. Department of Education's AFSA and you want to be considered for Federal student aid, you must check a box to have your information forwarded to the Federal processing center. The box is in the middle of the form.

For the Stafford Loan, PLUS, or SLS programs, there are some additional steps you must take to apply. (See pages 8 and 10 for information on these programs.)

Certain questions on your student aid application will determine whether you're considered dependent on your parents and must report their income and assets as well as your own (and your spouse's, if you're married), or whether you're independent and report only your own income (and that of a spouse). **So be sure to answer the questions on your student financial aid application carefully.** You may have to prove later that what you reported is correct.

☞ NOTE: If you want to apply to more than one school, and those schools use different student aid applications, you may not have to fill out more than one application. Instead, you may be able to use a short form called a "Request for Information Transfer" (RIT) and have the information from the *Federal* portion of one application sent to another school of your choice. Check with the schools you're interested in to see if you can fill out a RIT.

Apply as soon as possible after January 1, 1990. Send your application to the address given in your application booklet. It will take **4 to 6 weeks** for your application to be processed, and you may have to confirm or correct information and return it for reprocessing. (See "Student Aid Report" below.) Reprocessing takes **another 2 to 3 weeks.** Also, you may have to prove the information you reported is correct. You need to complete each step in the process promptly, so that you don't miss any deadlines (see "Deadlines," page 4). **Missing a deadline means you will lose out on student aid.**

If it's been more than 6 weeks since you applied and you haven't heard anything, you can check the status of your application by writing to the Federal Student Aid Information Center, P.O. Box 84, Washington, D.C. 20044.

When you write, make sure you include in your letter your full name, permanent address, Social Security Number, date of birth, and signature.

Or, you can call the number for status checks given on page 4.

☞ NOTE: Aid from Federal programs is not guaranteed from one year to the next. You must reapply every year. Also, if you change schools, your aid doesn't automatically go with you. Check with your new school to find out what steps you must take.

Student Aid Report

After you apply for Federal student aid, you'll receive a Student Aid Report (SAR) in 4 to 6 weeks. The SAR will contain the information you gave on your application plus your Pell Grant Index (PGI) number, which determines your Pell Grant eligibility, and your Family Contribution (FC) number, used in determining your eligibility for the campus-based and Stafford Loan programs.

Make sure you review the information that's printed out on the SAR. This information must be correct before you can receive any Federal student aid. If you need to make any changes, make them on Part 2 of your SAR, which will be called either the Information Review Form or the Information Request Form. Sign the Certification statement on the back of Part 2 and **return Part 2 only** to the address given on the back of Part 2. You'll receive a new SAR in 2 to 3 weeks.

If all the information on your SAR is correct as it is, and you're eligible for a Pell Grant, submit all **three parts** of the SAR to your financial aid administrator right away. Your aid administrator will use the information on your SAR to determine the amount of your Pell Grant.

Even if your SAR says you're not eligible for a Pell Grant, contact your financial aid administrator. He or she may use the Family Contribution (FC) number on the SAR in determining whether you're eligible for other Federal student aid.

If you have any trouble understanding what you're supposed to do after you get your SAR or how you're supposed to make corrections, your financial aid administrator can help you and can answer a questions you have.

To request a copy of your SAR or to correct your address for the records, write to the agency wher you sent your student aid application or write to the Federal Student Aid Information Center, P.O Box 84, Washington, D.C. 20044. When you writ make sure you include in your letter your full name, permanent address, Social Security Number, date of birth, and signature.

You can also request a copy of your SAR by calling the number for duplicate requests given on page 4. However, you can correct your address only by writing a letter.

Special Circumstances

Some students may have special financial considerations that can't be described adequately on an application. If you feel you have special circumstances that might affect the amount you and your family are expected to contribute toward your education, see your financial aid administrator. Remember, for the campus-based and Stafford Loan programs, the aid administrator may adjust your cost of education or your Family Contribution (FC) if he or she feels your circumstances warrant it. For example, if you believe the amount you and your family are expected to contribute toward your education is too high, you can ask your aid administrator to review your case. But remember, the aid administrator does not *have* to make any of these changes—there have to be very good reasons for doing so. Also remember that the aid administrator's decision is ***final*** and cannot be appealed to the U.S. Department of Education.

☞ NOTE: The Pell Grant Program does not allow for *individualized* adjustments. However, there are certain special conditions that would make the family's financial circumstances worse in 1990-91 than they were in 1989. If one of these conditions applies to you or your family, **estimated 1990 income information will be used** to calculate your Pell Grant eligibility, instead of 1989 income. The conditions are death of a parent or spouse, separation or divorce, loss of a full-time job, or loss of nontaxable income or benefits such as Social Security, child support, Aid to Families with Dependent Children (AFDC or ADC), welfare, or unemployment benefits.

If you think you meet one of the special conditions, see your financial aid administrator. If you qualify, the aid administrator will explain what steps to take so that estimated 1990 income will be used.

Deadlines

MAY 1, 1991—Your student aid application must be ***received*** by this date. The application you fill out will contain the address where your application must be sent. THERE ARE *NO EXCEPTIONS* TO THIS DEADLINE.

You should apply as soon after January 1, 1990, as you can. Schools often set deadlines early in the calendar year that students must meet in order to receive certain types of funds, including those from the campus-based programs (see pages 6 through 8 for information on these programs).

JULY 1, 1991, or your last day of enrollment in 1990-91, whichever comes first. This is the deadline for submitting your SAR to your school's financial aid office. Be sure you know your last day of enrollment in 1990-91—it may be earlier than July 1. The earlier you can submit your SAR, the better, but you must turn it in by the deadline.

Telephone Numbers

There may be times when you have questions about your application, your SAR, or other Federal student aid matters, and you need an answer r away. If so, you may call one of the numbers b **at the Federal Student Aid Information Center** between the hours of 9:00 a.m. and 5:30 p.m. (Eastern Standard Time), Monday through Friday:

1-(800) 333-INFO (a ***toll-free*** number)
The Information Center provides the following services at the toll-free number:

- Helping you file an application or correct a SAR
- Explaining the Request for Information Transfe (RIT) process
- Checking on whether a school takes part in Federal student aid programs
- Explaining student eligibility requirements
- Mailing publications

1-(301) 722-9200
You must call this number at the Information Center if you want to find out if your application has been processed, or if you want a duplicate Student Aid Report (SAR). **Please note that yo will have to pay for this call.** The Center ca not accept collect calls.

1-(301) 369-0518
If you are hearing-impaired, you may call this TDD number at the Information Center for help with any Federal student aid questions you may have. This number is not toll-free, and the Center canno accept collect calls.

If you have reason to suspect any fraud, waste, or abuse involving Federal student aid funds, you may call the following *toll-free* number:

1-(800)-MIS-USED
This number is the hotline to the U.S. Department of Education's Inspector General's office. You may remain anonymous, if you wish.

Student Rights

Education after high school costs you time, money, and effort. It's a big investment, and you should carefully evaluate the school you're considering. You have the *right* to know certain things about a school you're considering. To find out about a school, you need to—

Check the school's accreditation. Ask for the names of the school's accrediting and licensing organizations. You also have the right to ask for a copy of the documents describing the institution's accreditation or licensing. But don't assume that if a school is accredited that's all you need to know. . .

Find out about the school's programs for yourself. You have the right to ask a school about its programs, its faculty, and its instructional, laboratory, and other physical facilities (including what special facilities and services are available to the handicapped).

Find out about financial aid. You have the right to ask the school the following:

- What financial assistance is available, including information on all Federal, State, local, private, and institutional financial aid programs. You also have the right to know how a school selects financial aid recipients.

- What the procedures and deadlines are for submitting applications for each available financial aid program.

- How the school determines your financial need. This process includes how costs for tuition and fees, room and board, travel, books and supplies, and personal and miscellaneous expenses are considered in your cost of education. It also includes the resources considered in calculating your need (such as parental contribution, other financial aid, assets, etc.). You also have the right to know how much of your financial need, as determined by the school, has been met and how and when you'll receive your aid.

- How the school determines each type and amount of assistance you'll receive. You also have the right to ask the school to reconsider your aid "package" if you believe a mistake has been made, or if your enrollment or financial circumstances have changed.

- How the school determines whether you're **making satisfactory academic progress,*** and what happens if you're not. Whether you continue to receive Federal financial aid depends, in part, on whether you're making satisfactory progress.

- What the interest rate is on any student loan you may receive, the total amount you must repay, the length of time you have to repay, when you must start repaying, and what cancellation or deferment (postponement) provisions apply.

- If you're offered a College Work-Study job (see page 7 for information on this program)—what kind of job it is, what hours you must work, what your duties will be, what the rate of pay will be, and how and when you'll be paid.

- Who the school's financial aid personnel are, where they're located, and how to contact them for information.

Understand your school's refund policy. You have the right to know what your school's policy is. If something happens and you never register for classes, or if you drop out of school within a short time after you start, you may be able to get a part of your educational expenses returned to you. But after a certain date, you won't get any money back. Check with your school to find out what expenses you may have to pay if you drop out. Keep in mind that if you receive Federal student aid from any of the programs mentioned in this *Fact Sheet*—other than College Work-Study—some or all of that aid will be returned to those programs.

If you have a Stafford Loan or a Supplemental Loan for Students (SLS), or if your parents have a PLUS loan for you (see pages 8 and 10 for information on these programs), the school must explain its refund policy, in writing, to you and to all prospective students. The school must also make its refund policy known to students who are currently enrolled. The school must include examples of how its policy applies and must explain the procedures you must follow to obtain a refund. If the school changes its refund policy, it must make sure all students are made aware of the new policy.

GRANTS, WORK-STUDY, AND LOANS

Pell Grants

A Pell Grant helps undergraduates pay for their education after high school. For the Pell Grant

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*See "Important Terms," pages 11 to 12, for a definition of th term.

Program, an undergraduate is one who has not earned a bachelor's or first professional degree. (A professional degree would include a degree in such fields as pharmacology or dentistry, for example.)

Eligibility for those who receive a Pell Grant for the first time is generally limited to 5 to 6 years of undergraduate study. For more information, see your financial aid administrator.

For many students, Pell Grants provide a "foundation" of financial aid, to which aid from other Federal and non-Federal sources may be added. Unlike loans, grants don't have to be paid back.

How do I qualify?

You must be attending school at least half-time.*

To determine if you're eligible, the Department of Education uses a standard formula, passed into law by Congress, to evaluate the information you report on your student aid application. The formula produces a Pell Grant Index (PGI) number. Your Student Aid Report (see page 3) contains this number and will tell you whether you're eligible.

The formula used to determine your Pell Grant Index (PGI) is too long to be included here. However, you can get a booklet that describes it in detail by writing to—Formula Book, Department M-11, Pueblo, Colorado 81009-0015.

How much money can I get?

Awards for the 1990-91 academic year (July 1, 1990 to June 30, 1991) will depend on program funding. The maximum award for the 1989-90 academic year was $2,300. How much you actually get will depend not only on your Pell Grant Index (PGI) number, but on the cost of education at your school, whether you're a full-time or part-time student, and whether you attend school for a full academic year, or less than that.

When should I apply?

The sooner, the better. Your 1990-91 application must be *received* at the address given on your application *no later than* May 1, 1991. THERE ARE *NO EXCEPTIONS* TO THIS DEADLINE.

How will I be paid?

You must submit all parts of your Student Aid Report (SAR) to your school by the deadline noted on page 4. Your school will then credit your award to your account, pay you directly, or use a combination of these methods.

The school must tell you in writing how and when you'll be paid and how much your award will be. You should acknowledge the school's notification in writing, for the school's records. Schools must pay at least once per term (semester, trimester, or quarter). Schools that do not use formally defined traditional terms must pay at least twice per academic year.

Campus-Based Programs

Supplemental Educational Opportunity Grants (SEOG)
College Work-Study (CWS)
Perkins Loans

The three programs you'll read about next are called "campus-based" programs because they're administered by the financial aid administrator a each participating school. Even though each program is different—SEOG offers grants, CWS offers jobs, and Perkins provides loans—they ha these characteristics in common:

- You can go to school less than half-time* and still be able to receive aid.

- How much aid you receive from the campus-based programs depends on your financial need (see page 1), the amount of other aid you'll receive, and the availability of funds at your school. Unlike the Pell Grant Program, which provides funds to every eligible student, each school participating in any of the campus-based programs receives a certain amount of funds for each program. When that money is gone, there are no more awards from that program for that year.

- There's no one deadline for applying as there is for the Pell Grant Program—each school sets its own. But most deadlines are quite early in each calendar year. Be sure to check with the financial aid administrator at your school to find out what its deadlines are. **You'll probably miss out on receiving aid from the campus-based programs if you don't apply early!**

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*See "Important Terms," pages 11 to 12, for a definition of this term.

Supplemental Educational Opportunity Grants (SEOG)

What is an SEOG?

A Supplemental Educational Opportunity Grant (SEOG) is for undergraduates with exceptional financial need (with priority given to Pell Grant recipients), and it doesn't have to be paid back.

How much can I get?

You can get up to $4,000 a year, depending on the restrictions noted on the preceding page.

What's the difference between an SEOG and a Pell Grant?

The Department of Education guarantees that each participating school will receive enough money to pay the Pell Grants of its eligible students. As noted on the preceding page, there's no guarantee every eligible student will be able to receive an SEOG.

How will I be paid?

Your school will credit your SEOG to your account, pay you directly, or use a combination of these methods. Schools must pay students at least once per term (semester, trimester, or quarter). Schools that do not use traditional terms must pay at least twice during the academic year. (There's one exception: If the total SEOG aid you receive is $500 or less, the school may pay you just once during the year, if it chooses.)

College Work-Study (CWS)

What is College Work-Study?

The College Work-Study (CWS) Program provides jobs for undergraduate and graduate students who need financial aid. CWS gives you a chance to earn money to help pay your educational expenses.

How much can I make?

Your pay will be at least the current Federal minimum wage, but it may also be related to the type of work you do and the skills required. Your total CWS award depends on the restrictions noted on the previous page.

How will I be paid?

If you're an undergraduate, you'll be paid by the hour. If you're a graduate student, you may be paid by the hour or you may receive a salary. No CWS student may be paid by commission or fee. Your school will pay you at least once a month.

Are College Work-Study jobs on campus or off campus?

Both. If you work on campus, you'll usually work for your school. If you work off campus, your job will usually involve work that is in the public interest, and your employer will usually be a private or public non-profit organization, or a local, State, or Federal agency. However, some schools may have agreements with private sector employers for CWS jobs.

Can I work as many hours as I want?

No. Your school sets your work schedule. In arranging a job and assigning work hours, your financial aid administrator will take into account your class schedule, your health, and your academic progress. And remember, the amount you earn can't exceed your total CWS award.

Perkins Loans

What is a Perkins Loan?

A Perkins Loan is a low-interest (5 percent) loan to help you pay for your education after high school. These loans are for both undergraduate and graduate students and are made through a school's financial aid office. Your school is your lender. You must repay this loan.

How much can I get?

Depending on the restrictions noted on the previous page, you may borrow up to—

- $4,500 if you're enrolled in a vocational program, or if you have completed less than 2 years of a program leading to a bachelor's degree.

- $9,000 if you're an undergraduate student who has already completed 2 years of study toward a bachelor's degree and has achieved third-year status. (This total includes any amount you borrowed under Perkins [or under the National Direct Student Loan Program, its former name] for your first 2 years of study.)

year) for graduate or professional study. (This total includes any amount you borrowed under Perkins/NDSL for your undergraduate study.)

How will I be paid?

After you sign a **promissory note*** agreeing to repay the loan, your school will either pay you directly or credit your account. You'll receive the loan in at least two payments during the academic year. (There's one exception: If the total Perkins Loan you receive is $500 or less, the school may pay you just once during the year, if it chooses.)

When do I pay back this loan?

If you're attending at least **half-time**,* you have a "grace period" of 9 months after you graduate, leave school, or drop below **half-time**.* If you're a **less-than-half-time*** student, your grace period may be different. Check with your financial aid administrator.

If you borrowed under the old National Direct Student Loan (NDSL) Program ***on or after*** October 1, 1980, your grace period is 6 months. If you borrowed under that program ***before*** October 1, 1980, your grace period is 9 months.

At the end of your grace period, you must begin repaying your loan. You may be allowed up to 10 years to repay.

How much will I have to pay each month?

The amount of each payment depends on the size of your debt and on the length of your repayment period. Usually, you must pay at least $30 per month. In special cases—for example, if you're unemployed or ill for a long period of time—your school may allow you to make payments that are less than $30 per month or may extend your repayment period.

The following chart shows typical monthly payments and total interest charges for three different 5 percent loans over a 10-year period.

Total Loan Amount	Number of Payments	Monthly Payment	Total Interest Charges	Total Repaid
$ 4,500	120	$ 47.73	$1,227.60	$ 5,727.60
9,000	120	95.46	2,455.20	11,455.20
18,000	120	190.92	4,910.40	22,910.40

Can I defer (postpone) repayment of my Perkins Loan after I leave school?

Under certain conditions, yes—as long as you're not in **default**.* However, deferments aren't automatic. You have to apply for one through school, using a deferment request form that you must get from your school.

For information on what deferments are permissible under the Perkins Loan Program, see you financial aid administrator.

☞ NOTE: Even though you may have ***applied*** for a deferment, you still must continue to make payments until your deferment is processed. If you don't, you may end up in **default**.*

Are there ever any cases where repayment of a Perkins Loan can be cancelled?

Yes, a few. For example, your loan will be cancelled if you die or become totally and permanently disabled. Your loan can be cancelled if you're a teacher (under certain circumstances), or if you're a Head Start or a Peace Corps or VISTA volunteer. For more information, read your **promissory note*** or contact your financial aid administrator.

Stafford Loans

What is a Stafford Loan?

Stafford Loans are low-interest loans made to students attending school at least **half-time**.* Loans are made by a lender such as a bank, credit union, or savings and loan association. Sometimes a school acts as a lender. These loans are insured by a guarantee agency in each State and reinsured by the Federal Government. You must repay this loan.

For **new borrowers*** who receive loans for periods of enrollment beginning ***on*** or ***after*** July 1, 1988, the interest rate is generally 8 percent for the first 4 years of repayment and 10 percent after that. For **new borrowers*** who took out a loan ***between*** July 1, 1987, and June 30, 1988, the interest rate is 8 percent. Students who are ***not*** **new borrowers*** should check their **promissory note*** for the interest rate.

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*See "Important Terms," pages 11 to 12, for a definition of this term.

How much can I borrow?

Depending on your financial need (see page 1), you may borrow up to—

- $2,625 a year, if you're a first- or second-year undergraduate student.
- $4,000 a year, if you have completed 2 years of study and have achieved third-year status.
- $7,500 a year, if you're a graduate student.

The total debt you can have outstanding as an undergraduate is $17,250. This includes any amount you may have borrowed under the Guaranteed Student Loan (GSL) Program—the former name for the Stafford Loan Program. The total for graduate or professional study is $54,750, including any Stafford Loans and GSL's made at the undergraduate level.

☞ NOTE: You can't borrow more than the cost of education at your school, minus any other financial aid you receive.

How do I apply?

You can get an application from a lender, a school, or your State guarantee agency. After you fill out your part of the application, the school you plan to attend must complete its part, certifying your enrollment, your cost of education, your academic standing, any other financial aid you'll receive, and your financial need.

When the school's portion of the application is completed, you or your school submits it to the lender you've chosen. If the lender agrees to make the loan and gets the approval of the guarantee agency, the lender will send the loan amount to your school.

When should I apply?

Since not every lender participates in the Stafford Loan Program, you should begin looking for one as soon as you're accepted by your school. After you submit your application to a lender and the lender agrees to make the loan, it usually takes 4 to 6 weeks to get your loan approved by the guarantee agency, so give yourself as much time as possible to complete the application process.

How will I be paid?

Your lender sends your loan proceeds to your school. Your loan proceeds will be made payable either to you or to both you and your school. Your school will issue your loan proceeds to you in one or more payments. (In general, for longer periods of enrollment, the loan will be divided into two or more installments.)

How can I find out who the lenders are in my State?

Contact your State guarantee agency. It's the best source of information on the Stafford Loan Program in your State. To find out your State guarantee agency's address and phone number and to find out more information about borrowing, call the Federal Student Aid Information Center (toll-free): 1-(800) 333-INFO.

Is there any charge for making a Stafford Loan?

Yes, there is an "origination fee" of about 5 percent which will be deducted proportionately from each loan disbursement made to you. The money is passed on to the Federal Government to help reduce the Government's cost of subsidizing these low-interest loans.

Your lender may also charge you an insurance premium of up to 3 percent of the loan principal. This premium must be deducted proportionately from each disbursement. .

When do I pay back this loan?

After you graduate, leave school, or drop below **half-time,*** you have a certain period of time before you have to begin repayment, called a "grace period." The length of this period depends on when you took out your loan, but it is usually 6 to 12 months. Check your **promissory note*** or ask your lender what your grace period is.

How much will I have to pay each month?

The amount of each payment depends on the size of your debt and on the length of your repayment period. Usually, you'll have to pay at least $50 per month or $600 per year. Ask your lender what your monthly payments will be before you take out the loan, so you'll know what to expect.

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*See "Important Terms," pages 11 to 12, for a definition of this term.

monthly payments and total interest charges for 8 percent/10 percent loans of varying amounts, with typical repayment periods.

TYPICAL REPAYMENT PLANS

Total Indebtedness	Number of Payments	Monthly Payment	Interest Charges	Total Repaid
$ 2,600	64	$ 50.00	$ 614.60	$ 3,214.60
4,000	119	50.00	1,972.48	5,972.48
7,500	120	93.52	3,722.07	11,222.07
10,000	120	124.68	4,961.77	14,961.77
15,000	120	187.01	7,441.17	22,441.17

Source: National Council of Higher Education Loan Programs, Inc. (NCHELP), 1989

Your school must give you a loan repayment schedule, which lets you know the due date of your first payment, and the number, frequency, and amount of all payments.

Can I defer (postpone) repayment of my Stafford Loan after I leave school?

Yes, under certain conditions, and as long as your loan is not in **default.*** However, deferments are not automatic. For information on what deferments are permissible under the Stafford Loan Program, contact your financial aid administrator, your lender, or the guarantee agency in your State. If you believe you qualify, submit a written request for deferment to your lender.

☞ NOTE: Even though you may have ***applied*** for a deferment, you still must continue to make payments until your deferment is processed. If you don't, you may end up in **default.***

Are there ever any cases where repayment of a Stafford Loan can be cancelled?

Only if you become totally and permanently disabled, or if you die. However, if you serve as an enlisted person in certain selected specialties of the U.S. Army, the Army Reserves, the Army National Guard, or the Air National Guard, the Department of Defense will, as an enlistment incentive, ***repay*** a portion of your Stafford Loan. If you think you may qualify, contact your recruiting officer.

PLUS Loans/Supplemental Loans for Students (SLS)

What are PLUS and SLS loans?

PLUS loans are for **parents** who want to bor help pay for their children's education; Supple tal Loans for Students (SLS) are for **student** borrowers. Like Stafford Loans, both these loans are made by a lender such as a bank, credit union, or savings and loan association.

PLUS and SLS loans have variable interest rates adjusted each year. For the 1989-90 award yea the interest rate was 12 percent. The interest r for the 1990-91 award year will be determined i June 1990. The interest rate for each loan is shown on the **promissory note,*** signed by the borrower when the loan is made.

Who can get a loan, and how much can they borrow?

PLUS enables parents to borrow up to $4,000 per year, to a total of $20,000, for each child who is enrolled at least **half-time*** and is a dependent student. (See page 2 for a discussion of depende vs. independent students.)

Under SLS, graduate students and independe undergraduates may borrow up to $4,000 per y to a total of $20,000. This amount is in additio to the Stafford Loan limits. (In exceptional circumstances, the financial aid administrator ma authorize dependent undergraduates to apply for an SLS.)

How does a PLUS or SLS borrower apply?

The same way as for a Stafford Loan (see page 9). Unlike Stafford Loan borrowers, however, PLUS and SLS borrowers do not have to show need. However, like all borrowers, they may have to undergo a credit analysis.

☞ **Note to SLS borrowers:** Before you can receive an SLS, your school must determine your eligibility for a Stafford Loan and for a Pell Grant (if you're an undergraduate and your school participates in the Pell Grant Program). If you're eligible for aid from either or both of those programs, the amount you're eligible for may affect the amount you can borrow under SLS: Under SLS—as und the Stafford Loan Program—you can't borrow m than the cost of education at your school minus *other financial aid* you receive.

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*See "Important Terms," pages 11 to 12, for a definition of this term.

How will I be paid?

If your parent(s) takes out a PLUS loan for you, the lender sends the full amount of the loan proceeds in the form of a check directly to your parent(s). If you take out an SLS, the lender sends the loan proceeds to your school. Your loan proceeds will be made payable either to you or to both you and your school. Your school will issue your loan proceeds to you in one or more payments. (In general, for longer periods of enrollment, the loan will be divided into two or more installments.)

Is there any charge for making a PLUS or an SLS?

Your lender may charge an insurance premium of up to 3 percent of the loan principal. This premium must be deducted proportionately from each loan disbursement made to you. There is no origination fee for these loans.

When do my parents or I have to begin repaying these loans?

PLUS and SLS borrowers generally must begin repaying both principal and interest within 60 days after the last loan disbursement. However, if a deferment applies (including a deferment for being in school), borrowers do not begin repaying any ***principal*** until the deferment ends.

☞ NOTE: You must continue to pay the ***interest*** during a deferment period, unless the lender allows you or your parents to wait until the deferment ends to repay it.

What are the deferments?

SLS borrowers get the same deferments as Stafford Loan borrowers except that, as mentioned above, under SLS the deferments apply only to loan ***principal***. PLUS deferments are much more limited and also apply only to principal. For information about specific repayment and deferment conditions, contact your financial aid administrator, your lender, or the guarantee agency in your State.

☞ NOTE: Unlike Stafford Loans (see page 9), there are no grace periods for PLUS and SLS loans.

Are there any cancellation provisions?

They're the same as for Stafford Loans—only for death or permanent and total disability after the loan is taken out.

If I borrow under more than one of the loan programs mentioned in this *Fact Sheet*, can I combine payments so I won't have to make several different ones?

Yes, except for PLUS loans, all of the loans described in this *Fact Sheet* are eligible for "loan consolidation." This is a plan that allows certain eligible lenders to pay off your existing student loans and to create one new loan. You're eligible for loan consolidation if you have loans totalling at least $5,000. You must be in repayment (or have entered your grace period) before your loans can be consolidated. The interest rate on the consolidated loan will be 9 percent or more, depending on the interest rates of the loans consolidated. The repayment period will be from 10 to 25 years, depending on the amount to be repaid.

IMPORTANT TERMS

Anti-Drug Abuse Act Certification: To receive a Pell Grant, you must sign a statement certifying that you will not make, distribute, dispense, possess, or use drugs during the period covered by the grant. Your 1990-91 Student Aid Report (SAR) will contain this certification statement although, in some cases, your school may ask you to sign instead a separate statement it has prepared.

☞ NOTE: Your eligibility for *any* of the programs covered in this *Fact Sheet* may be suspended or terminated by a court as part of a conviction for possessing or distributing drugs.

Default: Failure to repay a student loan according to the terms agreed to when you signed a promissory note.* If you default on a student loan, your school, lender, State, and the Federal Government all can take action to recover the money, including notifying national credit bureaus of your default. This may affect your future credit rating for a long time. Also, you may be liable for expenses incurred in collecting the loan. If you decide to return to school, you're not entitled to receive additional Federal aid or a deferment of your loan repayments. Finally, the Internal Revenue Service may withhold your income tax refund. The amount of your refund will be applied toward the amount you owe.

Half-Time: At schools measuring progress by credit hours and academic terms (semesters, trimesters, or quarters), "half-time" means at least 6 semester hours or quarter hours per term. At schools measuring progress by credit hours but not using academic terms, "half-time" means at least 12 semester hours or 18 quarter hours per year. At schools measuring progress by clock hours, "half-time" means at least 12 hours per week. Note that schools may choose to set higher minimums than these. Also, Stafford Loan, PLUS, and SLS requirements may be slightly different.

You must be attending school at least half-time to be eligible to receive a Pell Grant, Stafford Loan, a PLUS, or an SLS. Half-time enrollment is not a requirement to receive aid from the Supplemental Educational Opportunity Grant, College Work-Study, and Perkins Loan programs.

New Borrower: A term that applies to the Stafford Loan, PLUS, or SLS programs. You're a "new borrower" under these programs if you had no outstanding (unpaid) Stafford Loans, PLUS, SLS, or consolidation loans on the date you signed your promissory note, *and* if your loan was either disbursed on or after July 1, 1987, or was for a period of enrollment that began on or after July 1, 1987. Once you qualify as a new borrower, the loan conditions that apply to "new borrowers" automatically apply to any future Stafford Loans, PLUS loans, or SLS loans you may receive.

Promissory Note: The legal document you sign when you get a student loan. It lists the conditions under which you're borrowing and the terms under which you agree to pay back the loan. It's very important to READ AND SAVE your copy of this document because you'll need to refer to it later when you begin repaying your loan.

Satisfactory Academic Progress: To be eligible to receive Federal student aid, you must be maintaining satisfactory academic progress toward a degree or certificate. You must meet your school's written standard of satisfactory progress. Check with your school to find out what its standard is.

If you received Federal student aid for the first time on or after July 1, 1987 *and* you're enrolled in a program that's longer than 2 years, the following definition of satisfactory progress *also* applies to you: You must be maintaining a "C" average by the end of your second academic year of study, or have an academic standing consistent with your institution's graduation requirements. You must continue to maintain satisfactory academic progress for the rest of your course of study.

Statement of Educational Purpose/Certification Statement on Refunds and Default: You must sign this statement in order to receive Federal student aid. By signing it, you are stating that you do not owe a refund on a Pell Grant or SEOG, and you are not in default on a Perkins Loan, Stafford Loan, PLUS, or SLS. You're also agreeing to use your student aid only for education-related expenses. Part 1 of the 1990-91 Student Aid Report (SAR) contains such a statement. You must sign either this one or a similar one prepared by your school.

Statement of Registration Status: If you're required to register with the Selective Service, you must sign a statement indicating you have done so before you can receive any Federal student aid. This requirement applies to males who were born on or after January 1, 1960, are at least 18, are citizens or eligible non-citizens, and are not currently on active duty in the Armed Forces. (Citizens of the Federated States of Micronesia, the Marshall Islands, or the Trust Territory of the Pacific [Palau] are exempt from registering.)

Part 1 of the 1990-91 Student Aid Report contai a statement of registration status. If you are required to register, you must sign either that statement or a similar one prepared by your schoo (Some schools require all students to sign a statement, indicating that they either have registered with the Selective Service or are not required to do so.)

Statement of Updated Information: You must sign a statement certifying that certain Student Aid Report (SAR) items are correct *at the time you submit your SAR to your school.* If information for any of those items changes after you submit your application, you must update the information so that it's correct on the date you sign your SAR. Otherwise, you won't be able to receive Federal student aid. Read the Statement of Updated Information on the back of Part 1 of your SAR for the information that must be updated.

☞ NOTE: The only exception to the requirement to update is when changes occur because your marital status changes. In that case, you cannot update.

QUESTIONS ABOUT STUDENT AID?

call the

FEDERAL STUDENT AID INFORMATION CENTER

TOLL-FREE

1-(800)-333-INFO

9:00 a.m.—5:30 p.m.
Eastern Time
Mon.—Fri.

FAF®

South Carolina

FINANCIAL AID FORM

College Scholarship Service
The College Board

School Year 1990·

Important — Read carefully before completing this form.

If you need financial aid, you will have to have financial information about yourself and your family sent to each college to which you apply as well as to certain federal and state aid programs. This Financial Aid Form permits you to apply for scholarships, grants, loans, and work-study awards from all possible sources — federal, state, institutional, and private. CHECK WITH THE COLLEGES YOU WANT TO ATTEND AND WITH YOUR STATE SCHOLARSHIP AND GRANT PROGRAMS TO SEE IF THEY NEED YOUR FAF INFORMATION.

Information on the Free 1990-91 Application for Federal Student Aid (AFSA)

If you are applying only for federal student financial aid, you may use the 1990-91 Application for Federal Student Aid (AFSA) instead of this form. The AFSA is developed and offered by the U.S. Department of Education and is free to all applicants. If you use the AFSA, you will not be charged any fees for processing your application. When using the AFSA, you will be considered for the following federal student financial aid programs: Pell Grants, Supplemental Educational Opportunity Grants (SEOG), College Work-Study (CWS), Perkins Loans, and Stafford Loan (formerly Guaranteed Student Loans (GSL)).

However, if you wish to apply for state, institutional, and/or private student aid, you may be required to fill out the Financial Aid Form (FAF), which collects extra information used in applying for non-federal aid. Check with your high school guidance counselor, college financial aid office, or state scholarship agency as to which form to file.

WARNING: You must fill out this form accurately. THE INFORMATION THAT YOU SUPPLY CAN BE CHECKED by your college or by the U.S. Department of Education. You may be asked to provide U.S. income tax returns, the worksheets in this booklet, and other information. If you can't or don't provide these records, you may not get federal aid.

If you get federal student aid based on incorrect information, you will have to pay it back; you may also have to pay fines and fees. If you purposely give false or misleading information on your form, you may be subject to a fine of $10,000, receive a prison sentence, or both.

What is the Financial Aid Form?

The Financial Aid Form (FAF) is a form that you fill out if you want to apply for financial aid for the 1990-91 school year from:

- Colleges where you are thinking of going after high school or where you now go
- State scholarship and grant programs
- Federal student financial aid programs

The FAF collects additional information not required for federal aid programs. Many colleges may require you to fill out all sections of the form to ensure that you are considered for all kinds of state and institutional aid.

The information you give on the FAF is confidential. Only the filer can authorize the release of the information on the FAF. (See statement under "Information on the Privacy Act and Use of Your Social Security Number" on page 8.) Your FAF information is kept on file for seven years after your form is processed.

After you complete the FAF, send it with the correct fee to the College Scholarship Service (CSS). CSS is the financial aid division of the College Board, a national, not-for-profit association of colleges, high schools, state agencies, and education organizations. CSS will analyze your FAF and send the information to the colleges and programs that you list or authorize on your FAF in question 77. Each college or program then decides whether you will get financial aid and how much aid you will get. CSS doesn't award financial aid.

How do I apply for student financial aid from:

- *Colleges?*

Check with the colleges you want to attend to see if they need your FAF information. If so, list them in question 77. You cannot change or delete a college or program once your form is processed. You can, however, send the information to additional colleges or programs. (See the instructions at the bottom right.) You should also check with your state scholarship or grant program to see if you should file a specific state version of the FAF. Some colleges may require you to fill out other forms as well.

- *Federal student financial aid programs?*

You apply for federal student financial aid programs by marking "Yes" in question 30z. You'll find more information in this booklet.

How much does it cost to send FAF information to colleges and state scholarship and grant programs?

It costs $8.75 for the first college and $5.75 for each other college you list in question 77. Don't send cash. Make your check or money order out to the College Scholarship Service.

The correct processing fee must be sent with your FAF. If it is not, your FAF will be returned to you unprocessed. Don't send the processing fee separately from your FAF. It also will be returned.

When should I fill out the FAF?

Fill out, sign, date, and mail the FAF (and the correct processing fee) after January 1, 1990. Any FAF received before January 1, 1990 will be returned to you unprocessed. If possible, you should send your FAF at least one month before the earliest deadline of the colleges and programs that you list in question 77. Remember that CSS can't establish or change deadlines. Colleges and programs establish them. At the very latest, CSS must receive your FAF by May 1, 1991.

Where do I send the FAF?

After you fill out the FAF, put it and the correct processing fee in the envelope th you'll find inside this booklet. Mail the envelope by regular first class mail to th address below.

College Scholarship Service
P.O. Box 6341
Princeton, NJ 08541

(Special handling such as registered, certified, or express mail will delay processing o your form.)

Will CSS tell me when it has finished processing my FAF?

Yes. CSS (under contract to the U.S. Department of Education) will send you a S Aid Report (SAR). CSS will also send you an Acknowledgment after it has ana your FAF. The SAR/Acknowledgment will be sent to the student's mailing addr given in question 2 of the FAF. You should get your SAR/Acknowledgment within fou to six weeks after you send your FAF to CSS. (See page 8, Additional Information on Federal Student Financial Aid Programs, for more information on your SAR.) If you did not apply for federal student aid programs, CSS will send you only an Acknowledgment.

The Acknowledgment will list the colleges and programs to which your FAF was sent. If you authorize more than eight colleges to get your FAF information, the first Acknowledgment will list only the first eight. A second Acknowledgment listing the additional colleges will be sent to you at a later date.

If you have questions about applying for federal student aid, you should wait until you receive your SAR. It will tell you how to get answers to your questions.

If you have questions about your Acknowledgment, you can call the CSS toll-free number: 800-772-3537 (Alaska and Hawaii 800-558-5885). Toll calls originating from the Eastern and Central time zones should be directed to the Princeton Office (215-750-8400), and inquiries from the Mountain and Pacific time zones should be directed to the Berkeley/Oakland Office (415-653-4242). The following telephone numbers have been designated Telephone Devices for the Deaf: 215-750-8009 (Princeton Office) and 415-420-1737 (Berkeley/Oakland Office). If you call the 215 or 415 area code numbers, there is a toll charge.

Normal business hours are 8:15 A.M.-4:00 P.M. for the Princeton Office (Eastern Time Zone) and the Berkeley/Oakland Office (Pacific Time Zone). The above numbers can be reached only during these periods.

What if I later want to send my FAF to another college or program?

The Acknowledgment has a section that you can send to CSS if you later want your FAF to go to another college or program. The section is called the Additional College Request (ACR) form. The fee for the ACR is $8.75 for the first college or program y list and $5.75 for each additional one.

Note: Some colleges and programs may ask you to send a copy of your and/or your parents' income tax return to them. If so, send it directly to the college or program. If you don't give the income tax information that is asked for, you may not receive aid. **Don't send income tax or W-2 forms with your FAF to CSS, since they normally will not be kept or sent to the colleges and programs.**

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BEST COPY AVAILABLE

FEDERAL STUDENT FINANCIAL AID PROGRAMS

You can use this form as the first step in applying for student financial aid from five federal student assistance programs. These programs are offered by the U.S. Department of Education (U.S.E.D.). More than 8,600 schools take part in one or more of the federal programs. However, some schools do not take part in all the programs. The information on this page will answer some of your questions about these five programs. For more information on federal student aid programs, see "ADDITIONAL INFORMATION ON FEDERAL STUDENT FINANCIAL AID PROGRAMS" on page 8.

Who Can Get Aid from the Five Federal Student Financial Aid Programs

Eligibility Requirements	Pell Grants	Stafford Loans (formerly Guaranteed Student Loans (GSL))	Supplemental Educational Opportunity Grants (SEOG)	College Work-Study (CWS)	Perkins Loans
Undergraduate	Yes	Yes	Yes	Yes	Yes
Graduate	No	Yes	No	Yes	Yes
At least half-time	Yes*	Yes	Yes*	Yes*	Yes*
Must pay back	No	Yes	No	No	Yes
Must be a U.S. citizen or eligible noncitizen	Yes	Yes	Yes	Yes	Yes
Must be registered with the Selective Service (if required)	Yes	Yes	Yes	Yes	Yes
Must have financial need	Yes	Yes	Yes	Yes	Yes
Must attend a participating school	Yes	Yes	Yes	Yes	Yes
Must be working toward a degree or certificate	Yes	Yes**	Yes	Yes	Yes
Must be making satisfactory academic progress	Yes	Yes	Yes	Yes	Yes
Must not be in default or owe a refund on a federal grant or educational loan	Yes	Yes	Yes	Yes	Yes
Having a bachelor's degree makes applicant ineligible	Yes	No	Yes	No	No
Conviction of drug distribution or possession may make student ineligible	Yes	Yes	Yes	Yes	Yes

* In some cases, students going to school less than half-time may be eligible. Check with the financial aid administrator.

** In some cases, students don't have to be in a degree or certificate program. Check with your financial aid administrator.

INSTRUCTIONS

Read the instructions as you fill out this form. Mistakes will delay the processing of your form. Some instructions appear on the form itself. Since these instructions are self-explanatory, no additional information is provided. Where additional information is necessary, you will find it in this instruction booklet. BEFORE YOU BEGIN TO FILL OUT THE FORM, TEAR IT OUT OF THE BOOKLET AND LAY IT ALONGSIDE THE INSTRUCTIONS SO THAT YOU CAN CHECK FOR ADDITIONAL INSTRUCTIONS AS YOU GO ALONG. The instructions for this form will usually answer questions that you have. If you need more help, see your high school guidance counselor or your college financial aid administrator.

Although other people (besides the student who is applying for aid) may help fill out this form, it is about the student. On this form, the words "you" and "your" always mean the student. The word "college" means a college, university, graduate or professional school, vocational or technical school, or any other school beyond high school. "Student financial aid" means money from educational loans, grants, and scholarships. It also means earnings from the College Work-Study program or other earnings you received based on your financial aid administrator's determination of your financial need.

Records you will need

Get together these records for yourself and your family.

- 1989 U.S. income tax return (IRS Form 1040, 1040A, or 1040EZ)
- 1989 state and local income tax returns
- W-2 forms and other records of money earned in 1989
- Records of untaxed income, such as welfare, social security, AFDC or ADC, or veterans benefits
- Current bank statements
- Current mortgage information
- Records of medical and dental bills that were paid in 1989
- Business and farm records
- Records of stocks, bonds, and other investments

Keep these records.

Won't file a tax return. Even if you and your spouse or your parents don't file an income tax return for 1989, you will need to know earnings for the year. You may also need records showing the amount of income you reported on this form.

Tax return not completed yet. If you, your spouse, and/or your parents haven't completed a 1989 U.S. income tax return but will be filing one, it is recommended that you complete your tax return before filling out this FAF. Knowing what will be on your tax return will help you to fill out the FAF accurately. When your FAF is compared with the official 1989 IRS Form 1040, 1040A, or 1040EZ that is filed by you and your family, the financial information must agree. If there are any errors, you will have to correct the information and send it back to the U.S.E.D. If this happens, it will take longer to determine whether you are eligible for federal student aid. It could mean a delay in getting student financial aid.

If you, your spouse, and/or your parents filed or will file a "Foreign Tax Return" or are a "Native American," see page 7.

Special Instructions for Filling Out the FAF

Your FAF will be scanned by machine and then processed by computer. Follow the instructions below to avoid errors and delays in the processing of your FAF.

- Use only a sharp No. 2 (soft-lead) black pencil. Don't use ballpoint pen, ink, colored pencil, crayon, or magic marker.
- Print clearly.
- Mark response boxes with an X, like this ☒.
- Write only in the response boxes or answer spaces. Don't write in the margins of the form or outside the answer boxes or spaces. Use Section R for explanations.
- If you make a mistake, use a pencil eraser only. Erase completely—don't leave smudges or marks. Don't cross out or write over any entry.
- Don't use "white-out" or correction fluid anywhere on the FAF.
- Don't use a photocopy of the FAF or a FAF that is torn, stained, or crumpled. A photocopy or damaged form can't be processed and will be returned to you.
- Don't staple anything to the FAF.
- Don't change, delete, or add to any questions, and don't cross out any section
- Follow all instructions exactly. If your answer is zero, write "0." Leave questions or sections blank only if you are instructed to do so.
- Round all figures to the nearest dollar. Don't use cents.

Do Use:	Don't Use:
■ a sharp No. 2 pencil	■ ballpoint pen, ink, colored pencil, crayon, magic marker
■ a pencil eraser	■ "white-out" or an ink eraser
■ a clean FAF	■ a torn, crumpled, stained FAF or a photocopy of the FAF

All students must fill in the white areas of the form. Also, fill in the blue and/or gray areas as directed.

Section A — Student's Identification Information

Print in this section information about the student who is applying for aid.

2. Write in the address where you will be receiving mail. Mail (including the S… and the Acknowledgment) will be sent to this address. Don't use the address of the financial aid office or any other office.

Use only the state/country abbreviations listed below. If your place of residence is not included, leave the state/country abbreviation blank and write in the name of your city and territory or country in the space for city.

Alabama	AL
Alaska	AK
Amer. Samoa	AS
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Florida	FL
Georgia	GA
Guam	GU
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA
Puerto Rico	PR
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virgin Islands	VI
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY
Canada	CN
Federated States of Micronesia	FM
Marshall Islands	MH
Mexico	MX
Northern Mariana Islands	MP
Palau	PW

4. Write in the two-letter abbreviation of your current state/country of legal residence. Use the state/country abbreviations list above.

6. Write in your birth date. For example, if you were born July 5, 1971, write:

Month	Day	Year
0 7	0 5	7 1

7. If you are a U.S. citizen (or a U.S. national), mark box "1" and go to question 8.

Mark box "2" and write in your Alien Registration Number if you are one of the following:

- U.S. permanent resident and you have an Alien Registration Receipt Card (I-151 or I-551).
- Other eligible noncitizen with a Departure Record (I-94) from the U.S. Immigration and Naturalization Service showing any one of the following designations: (a) "Refugee," or (b) "Asylum Granted," or (c) "Indefinite Parole" and/or "Humanitarian Parole," or (d) "Cuban-Haitian Entrant."
- Other eligible noncitizen with a temporary residency card (I-688).

If you are a citizen of the Marshall Islands, Federated States of Micronesia, or Palau, see your financial aid administrator.

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on only an F1 or F2 student visa, only a J1 or J2 exchange visitor visa, or only a G series visa (pertaining to international organizations), you must mark box "3."

9. Mark your year in college from July 1, 1990 to June 30, 1991.

10. Mark "No" if you don't have a bachelor's degree and you won't have one by July 1, 1990.

Mark "Yes" if you already have a bachelor's degree or will have one by July 1, 1990. Also mark "Yes" if you have or will have a degree from a university in another country that is equal to a bachelor's degree.

Section B — Student Status

Answer all of question 11. A blank counts as "No."

11a. Mark the correct box.

11b. Mark "Yes" if you are a veteran of active service in the U.S. Army, Navy, Air Force, Marines, or Coast Guard. Mark "No" if you are or were:

- only an ROTC student,
- only a cadet or midshipmen at one of the service academies,
- only a National Guard or Reserves enlistee,
- currently serving in the U.S. Armed Forces, or
- never in the U.S. Armed Forces.

11c. Mark "Yes" if (1) both your parents are dead and you don't have an adoptive parent or legal guardian or (2) if you have been legally placed under the care of the court. (For a definition of "Legal Guardian," see page 7.) Otherwise, mark "No."

11d. Mark "Yes" if you have any children who get more than half their support from you. Also mark "Yes" if other people live with you and get more than half their support from you and will continue to receive that support during the 1990-91 school year. Don't include your spouse. Otherwise, mark "No."

"Parents" in questions 12, 14a, 14b, 14c, 14d, and 15 means your mother and/or father, or your adoptive parents, or legal guardian. "Parents" does not mean foster parents and, for this section, it does not mean stepparents. Later the instructions will tell you if you should supply information about your stepparents.

Unmarried Undergraduate Students Only

12. If your parents claimed you as an exemption on their 1988 income tax return and/or will do so on their 1989 income tax return, you must mark "Yes." If your parents are divorced or separated, mark "Yes" if either of your parents claimed you as an exemption in 1988 and/or will do so on their 1989 income tax return. Otherwise, mark "No."

13. Mark the box that best describes when you first received federal student aid, beginning with the 1987-88 school year (July 1, 1987- June 30, 1988). Mark only one box.

Federal student aid includes:

- Pell Grant,
- Stafford Loan/Guaranteed Student Loan (GSL), including Supplemental Loans for Students (SLS),
- Supplemental Educational Opportunity Grant (SEOG),
- College Work-Study (CWS),
- Perkins Loan/National Direct Student Loan (NDSL), or
- State Student Incentive Grants (SSIG). These grants often have other names such as Student Incentive Grants, Incentive Grants, Tuition Grants, etc.

Below are some examples to help you answer question 13.

Example #1 — Buck Bundy received federal student aid in the 1986-87 and 1987-88 school year. Therefore, Buck should mark box "1." Even if Buck had received federal student aid in the 1985-86 and 1987-88 school year, he should still mark box "1," because the first school year (beginning with 1987-88) in which he received federal student aid is 1987-88.

Example #2 — Jeff Akbar first received federal student aid in the 1988-89 school year. Therefore, Jeff should mark box "2."

Example #3 — Wu Lin first received federal student aid in the 1989-90 school year. Therefore, Wu should mark box "3."

Example #4 — Vickie Tingley received federal student aid in the 1986-87 school year and has not received federal student aid since then. Therefore, Vickie should mark box "4."

Example #5 — Joaquin Rodriguez has never received federal student aid. Therefore, Joaquin should mark box "4."

14a.-14d. When figuring your resources for questions 14a, 14b, 14c, or 14d, be sure to include:

- wages, salaries, tips, etc.
- interest income and dividend income
- any student financial aid (except PLUS loans)
- personal long-term cash loans used for educational purposes, and
- any other income and benefits (such as veterans cash benefits, fellowships, etc.).

Don't include any resources such as money that you earned from your parents or gifts that you received from them.

Married Students or Graduate/Professional Students Only

15. If your parents will claim you on their 1990 income tax return, you must mark "Yes."

- you answered "No" to all parts of question 11 but after answering questio 12, 14a, 14b, 14c, 14d, or 15 you are told to fill in the gray and white area and
- you were not required to provide parental information in 1989-90; and
- you were claimed by any person other than your spouse as a tax exemptio in 1989.

Important Instructions for Sections C, D, E, F, G, I, M, and N

Blue area — parents' information

Read the descriptions below. Choose the one that is true for you and follow the instructions.

☐ **Your parents are both living and married to each other.** Answer the questions on the rest of the form about them.

☐ **You have a legal guardian.** Answer the questions on the rest of the form about your "Legal Guardian." For a definition of "Legal Guardian" see page 7.

☐ **Your parents are divorced or seperated.** Answer the questions on the rest of the form about the parent you lived with most in the last 12 months. For example, if you lived with your mother most, answer the questions about her and not about your father. If you did not live with one parent more than with the other in the last 12 months, answer in terms of the parent who provided the most financial support during that time. If neither parent provided greater financial support during the last 12 months, answer in terms of the parent who provided the greater support during the most recent calendar year. (Support includes money, gifts, loans, housing, food, clothes, car, medical and dental care, payment of college costs, etc.)

☐ **Your parent is widowed or single.** Answer the questions on the rest of the form about your widowed or single parent.

If your parents are separated or divorced, or if your parent is widowed or single, and the parent you counted above has married or remarried, read the next paragraph.

If you have a stepparent: If the parent that you counted above has married or remarried, you must also include information about your stepparents (even if they **were not married in 1989).**

If you are reporting information about your stepparent, note that whenever the wor "parents" is used on the rest of the form, it also means your stepparent.

Section C — Household Information

Parents' information — blue area

16. Mark the current marital status of the people that you give inform this form. For example, if you give information about your moth father, mark the box that says "married," because your mother anc are married.

17. Write in the two-letter abbreviation for your parents' current state/co legal residence. Use only state/country abbreviations given under the in tion for question 2.

18. Write in the number of people that your parents will support between July 1990 and June 30, 1991. Always include your parents and yourself. Incluc your parents' other children if they get more than half their support from yo parents. Also include them if they would be required to provide parent information when applying for federal student aid for the 1990-91 scho year. Include other people only if they now live with and get more than half the support from your parents and will continue to get this support between July 1990 and June 30, 1991. (Support includes money, gifts, loans, housing, foo clothes, car, medical and dental care, payment of college costs, etc.)

19. Write in the number of people from question 18, including yourself, who will b going to college between July 1, 1990 and June 30, 1991. Include on students enrolled for at least 6 credit hours per term. If the school uses clo hours, include only students attending at least 12 clock hours per week.

Gray area — student's information

Fill out this section with information about yourself (and your spouse). If you are divorced or seperated, don't include information about your spouse. Although you must always fill in the gray and white areas, you may also have to fill in the blue areas if a college or program tells you to.

Student's (and spouse's) information — gray area

20. Write in the number of people that you (and your spouse) will support betwe July 1, 1990 and June 30, 1991. Include yourself and your spouse. Include yo (and your spouse's) children if they get more than half their support from yo Include other people only if they meet the following criteria:

- they now live with you, and
- they now get more than half their support from you, and
- they will continue to get this support between July 1, 1990 a 1991.

21. Write in the number of people from question 20, including yourself, who will b going to college between July 1, 1990 and June 30, 1991. Include on students enrolled for at least 6 credit hours per term. If the school uses clo hours, include only students attending at least 12 clock hours per week.

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Section D — Parents' 1989 Income, Earnings, and Benefits

If the instructions tell you to skip a question, leave it blank. If your answer to any other question is "none" or "zero," put a zero in the answer space.
Don't leave it blank or don't use dashes. For example: $ 0 .00

If your parents filed or will file a "Foreign Tax Return" or a Puerto Rican tax return, see page 7.

22. U.S. income tax figures for 1989

From a completed return. Mark box "1" or "2" to indicate which IRS form was filed. Use the tax return to answer questions 23-28.

Estimated. Mark box "3" or "4" if your parents have not yet filed but will file a 1989 U.S. income tax return. Use their financial records to answer questions 23-28. For these questions, you must write in the figures that will be on the tax return. Filling out a 1989 U.S. income tax return will help you answer these questions.

A tax return will not be filed. Mark box "5" if your parents will not file a 1989 U.S. income tax return. Don't answer questions 23-25. Skip to question 26.

If you are giving information for only one parent and that parent filed (or will file) a joint tax return for 1989, give only that parent's portion of the exemptions and income asked for in questions 23-28. If your parents are married and they filed separate tax returns for 1989, be sure to include both parents' exemptions and income in questions 23-28.

23. Total number of exemptions for 1989

Write in the number from Form 1040, line 6e, or 1040A, line 6e. If your parent used the 1040EZ and marked "Yes" in question 4 of that form, write in "00." Otherwise, write in "01."

Important: See the table below for some of the types of student financial aid that you should exclude from income and taxes in questions 24-28.

Student Financial Aid	Exclude if based on need	Exclude if not based on need
Grants	Yes	Yes
Scholarships	Yes	Yes
Fellowships	Yes	Yes
Earnings from a work program	Yes	No
Loans	Yes	Yes

24. Income for 1989 from U.S. income tax return

Don't include any income or capital gains from the sale of a business or farm if the sale resulted from a voluntary or involuntary foreclosure, forfeiture, involuntary liquidation, or bankruptcy.

Use Worksheet I on page 8 to answer question 24 if you can't get a 1989 tax form but will be filing one.

25. U.S. income tax paid for 1989

Make sure this amount doesn't include any FICA, self-employment, or other taxes. Don't copy the amount of "federal income tax withheld" from a W-2 form.

26.& Income earned from work in 1989
27. If you skipped questions 23-25, include your parents' earnings from work in 1989. Add up the earnings from your parents' W-2 forms and any other earnings from work that are not included on the W-2 forms.

If you answered questions 23-25, include the "wages, salaries, tips, etc." from your parents' Form 1040, line 7; 1040A, line 7; or 1040EZ, line 1. If your parents filed a joint return, report your father's and mother's earnings separately. If your parents own a business or farm, also add in the amounts from Form 1040, lines 12 and 19.

28a.-28d. Untaxed income and benefits for 1989

28a. Social security benefits for 1989

Write in the amount of untaxed social security benefits (including Supplemental Security Income) that your parents got in 1989. Don't include any benefits reported in question 24. Don't give monthly amounts; write in the total for 1989. Be sure to include the amounts that your parents got for you and their other children.

28b. Aid to Families with Dependent Children (AFDC or ADC) for 1989

Don't give monthly amounts; write in the total for 1989. Don't report social security benefits here.

28c. Child support received for all children for 1989

Include the student. Don't report monthly amounts; write in the total for 1989.

28d. Other untaxed income and benefits for 1989

Add up your parents' other untaxed income and benefits for 1989. Use Worksheet II on page 8.

Section D — Student's (& Spouse's) 1989 Income, Earnings, and Benefits

Everyone must answer the questions in the Student (and Spouse) column in Section D.

If you are married, include your spouse's information in Section D.

the instructions tell you to skip a question, leave it blank. If your answer to any other estion is "none" or "zero," put a zero in the answer space.
t leave it blank; don't use dashes. For example: $ 0 .00

u or your spouse filed or will file a "Foreign Tax Return" or a Puerto Rican tax return, see page 7.

22. U.S. income tax figures for 1989

From a completed return. Mark box "1" or "2" to indicate which IRS form was filed. Use this tax return to answer questions 23-28.

Estimated. Mark box "3" or "4" if you (and your spouse) have not yet filed but will file a 1989 U.S. income tax return. Use your financial records to answer questions 23-28. For these questions, you must write in the figures that will be on the tax return. Filling out a 1989 U.S. income tax return will help you answer these questions.

A tax return will not be filed. Mark box "5" if you (and your spouse) will not file a 1989 U.S. income tax return. Don't answer questions 23-25. Skip to question 26.

If you are divorced, separated, or widowed and you filed (or will file) a joint tax return for 1989, give only your portion of the exemptions and income asked for in questions 23-28. If you are married and you and your spouse filed separate tax returns for 1989, be sure to include both your and your spouse's exemptions and income in questions 23-28, even if you were not married in 1989.

23. Total number of exemptions for 1989

Write in the number from Form 1040, line 6e, or 1040A, line 6e. If you used the 1040EZ and you marked "Yes" in question 4 of that form, write in "00." Otherwise, write in "01."

Important: See the table below for some of the types of student financial aid that you should exclude from income and taxes in questions 24-28.

Student Financial Aid	Exclude if based on need	Exclude if not based on need
Grants	Yes	Yes
Scholarships	Yes	Yes
Fellowships	Yes	Yes
Earnings from a work program	Yes	No
Loans	Yes	Yes

24. Income for 1989 from U.S. income tax return

Don't include any income or capital gains from the sale of a business or far If the sale resulted from a voluntary or involuntary foreclosure, forfeiture, invol untary liquidation, or bankruptcy.

Use Worksheet I on page 8 to answer question 24 if you can't get a 1989 U.S tax form but will be filing one.

25. U.S. income tax paid for 1989

Make sure this amount doesn't include any FICA, self-employment, or other taxes. Don't copy the amount of "federal income tax withheld" from a W-2 form

26.& Income earned from work in 1989
27. Don't leave blank. Write in "0" if you or your spouse didn't have any earne income. Also write in "0" in question 27 if you are not married.

If you skipped questions 23-25, include your (and your spouse's) earning from work in 1989. Add up the earnings from your (and your spouse's) W- forms and any other earnings from work that are not included on the W-2 form

If you answered questions 23-25, include the "wages, salaries, tips, etc from your (and your spouse's) Form 1040, line 7; 1040A, line 7; or 1040EZ, lin 1. If you and your spouse filed a joint return, report your and your spouse earnings separately. If you (or your spouse) own a business or farm, also ad in the amounts from Form 1040, lines 12 and 19.

28a.-28d. Untaxed income and benefits for 1989

Don't include benefits reported in questions 28a, 28b, 28c, and 28d of the parent column here.

28a. Social security benefits for 1989

Write in the amount of untaxed social security benefits (including Supplemental Security Income) that you (and your spouse) got in 1989. Don't include any benefits reported in question 24. Don't give monthly amounts; write in the total for 1989. Be sure to include the amounts that you got for your children.

28b. Aid to Families with Dependent Children (AFDC or ADC) for 1989

Don't give monthly amounts; write in the total for 1989. Don't report social security benefits here.

28c. Child support received for all children for 1989

Don't report monthly amounts; write in the total for 1989.

28d. Other untaxed income and benefits for 1989

Add up your (and your spouse's) other untaxed income and benefits for 1989. Use Worksheet II on page 8.

Section E — Federal Student Aid Releases and Certification

29. Write in the complete name, city, state, and CSS code number of the college that you will most likely be going to during the 1990-91 school year. Write in the name, address, and CSS code number of your first-choice college on the first line. On the second line, write in the name, address, and CSS code number of your second-choice college. If you don't know yet which colleges you are most interested in, you may leave this question blank. See the CSS code list for college codes. You must also list these same colleges in question 77.

30a. Mark "Yes" if you want CSS to send information from your FAF to the U.S. Department of Education so that you can be considered for a Pell Grant and other federal student financial aid. Mark "No" if you don't want to be considered for such aid. If you leave the answer to this question blank, it will be counted as "No."

30b. If you mark "Yes" to either part of 30b, the U.S. Department of Education may send information from this form to the financial aid agency in your state and/or the college(s) (or their representatives) in question 29. Mark "No" if you don't want your information sent.

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The U.S. Department of Education will provide your name, address, social security number, date of birth, Pell Grant Index (PGI), Family Contribution (FC), student status, year in college, and state of legal residence to the college(s) that you listed in question 29 (or their representatives), even if you mark "No" to the "college(s)" part of the question. This information will also go to the state scholarship agency in your state of legal residence to help coordinate state financial aid programs with federal student aid programs, even if you mark "No" to the "state agency" part of the question. However, no additional information such as income information will be sent if you mark "No" to either part of question 30b.

All state agencies and most colleges that use the *FAF* require that you have a CSS analysis of your information sent to them. Answering "Yes" to this question will not, in most cases, meet agency and college application requirements. Normally, you must also ask in Section Q that a CSS analysis be sent to the state agency and colleges.

31. Selective Service registration

In order to receive federal student aid, you must be registered with Selective Service if you are a male who is at least 18 years old and born after December 31, 1959.

Mark the box only if you:

- are 18 through 25 years of age, and
- have not yet registered with Selective Service, and
- give Selective Service permission to register you.

If you believe that you are not required to be registered, call the Selective Service at 1-800-621-5388 for information regarding exemptions.

Note: If you wish to register with Selective Service, you must give permission for CSS to send your FAF information to the U.S. Department of Education. You can do this by marking "Yes" in question 30a.

32. Certification: You must sign this form. If you are married, your spouse must sign this form. If you filled in the blue areas, at least one of your parents must also sign this form. Everyone signing this form is certifying that all the information on the form is correct and that everyone is willing to give documents (such documents may include U.S., state, or local income tax returns) to prove that the information is correct. Don't complete, sign, or date the form before January 1, 1990.

Important:

- If you are applying for institutional or state aid as well as federal aid, you must sign the Certification at question 32 and complete all the remaining sections of this form. Skip the worksheets below. Go to question 33.

OR

- If you are applying only for federal aid, complete Worksheet A or B below to see if you need to fill out Sections F through I. Although not required for federal programs, your college may require that you complete Sections J through R, and S if applicable. The processing of this additional information is already included in your fee. Be sure to sign the Certification at question 32. If you want CSS to send information to colleges, you must list them at question 77 and pay the correct fee. You must include the fee for at least one college or program.

WORKSHEET A

If you are filling out the blue and white areas, you will need to refer to Section D to complete Worksheet A below. The worksheet will tell you whether you must fill out the Supplemental Information (Sections F through I).

WORKSHEET A FOR THE SIMPLIFIED NEEDS TEST

1. Did or will you, your spouse, or your parents file a 1989 IRS Form 1040?

☐ Yes (Fill out Sections F through I.) ☐ No (Fill out the rest of this worksheet.)

Mark "Yes" if a foreign or Puerto Rican tax return was or will be filed.

Income from:	Parents Column A	Student/Spouse Column B
2a. Question 24	$ .00	$ .00
OR		
2b. Questions 26 and 27 (Use only if you left question 24 blank.)	$ .00	$ .00
3. Write in the total of column A and column B entries from Question 2.	$ .00	

If the total from 3 is $15,000 or less, follow the instructions at question 77 and mail the form to CSS. You do not have to fill out Sections F through I (unless you, your spouse, or at least one of your parents is a dislocated worker or your school or state asks you to).

If the total from 3 is $15,001 or more, you must fill out Sections F through I. Then, follow the instructions at question 77 and mail the form to CSS.

WORKSHEET B

If you are filling out the gray and white areas, you will need to refer to Section D to complete Worksheet B below. The worksheet will tell you whether you must fill out Sections F through I.

WORKSHEET B FOR THE SIMPLIFIED NEEDS TEST

1. Did or will you (or your spouse) file a 1989 IRS Form 1040?

☐ Yes (Fill out Sections F through I.) ☐ No (Fill out the rest of this worksheet.)

Mark "Yes" if a foreign or Puerto Rican tax return was or will be filed.

Income from:	Student/Spouse
2a. Question 24	$ .00
OR	
2b. Questions 26 and 27 (Use only if you left question 24 blank.)	$ .00

If the answer from either Question 2a or 2b is $15,000 or less, follow the instructions at question 77 and mail the form to CSS. You do not have to fill out Sections F through I (unless you are or your spouse is a dislocated worker or your school or state asks you to).

If the answer from either Question 2a or 2b is $15,001 or more, you must fill out Sections F through I. Then, follow the instructions at question 77 and mail the form to CSS.

Section F — Parents' 1989 Expenses

Don't leave any of these questions blank. If a question doesn't apply to your pa write in "0."

33. Medical and dental expenses in 1989 not paid by insurance

Write in the amount of money that your parents paid in 1989 for medica a dental expenses (include insurance premiums). Don't include amounts co ered by insurance or self-employed health deductions from Form 1040, line 2 If your parents itemized deductions on their 1989 U.S. income tax r in the amount from Form 1040, Schedule A, line 2.

34a. Elementary, junior high, and high school tuition paid in 1989

Write in the amount of money that your parents paid in 1989 for elem junior high, and high school tuition for family members who were included question 18. (Tuition doesn't include room, board, books, transportation, et Don't include tuition paid by scholarships. Also, don't include any tuition th your parents paid for you or any tuition for preschool or college.

34b. Write in the number of dependent children for whom the amount listed in 3 was paid in 1989. Don't include yourself, the student, or any person who w not included in question 18.

Section F — Student's (& Spouse's) 1989 Expenses

Don't leave any of these questions blank. If a question doesn't apply to you, write in "

33. Medical and dental expenses in 1989 not paid by insurance

Write in the amount of money that you (and your spouse) paid in 1989 medical and dental expenses (include insurance premiums). Don't inclu amounts covered by insurance or self-employed health deductions from For 1040, line 26. If you (and your spouse) itemized deductions on your 1989 U. income tax return, write in the amount from Form 1040, Schedule A, line 2.

34a. Elementary, junior high, and high school tuition paid in 1989

Write in the amount of money that you (and your spouse) paid in 1989 elementary, junior high, and high school tuition for family members who we included in question 20. (Tuition doesn't include room, board, books, transpo tation, etc.) Don't include tuition paid by scholarships. Also, don't include a tuition that you paid for yourself or any tuition for preschool or college.

34b. Write in the number of dependent children for whom the amount listed in 3 was paid in 1989. Don't include yourself or any person who was not inclu in question 20.

Section G — Parents' Asset Information

35. Mark "Yes" if either of your parents (for whom you are providing infor meets all the following descriptions for a displaced homemaker:

- your parent has not worked full-time in the labor force for a sub number of years (e.g., approximately five years or more) but has those years worked in the home providing unpaid services for family and
- your parent has been dependent on public assistance or on t another family member but is no longer receiving that income, or is receiving public assistance because of dependent children in the h and
- your parent is unemployed or underemployed and is experiencing diffi in obtaining or upgrading employment.

"Unemployed" means not working this week but being available for work. qualify, your parent must have made specific efforts to get a job someti during the last four weeks.

"Underemployed" means working part-time even though your parent wan full-time employment. It refers to a condition where work is slack or only par time work is available.

Mark "No" if neither of your parents meets all the descriptions mention above.

36. Write in the age of your older parent for whom you gave information c this form.

Don't leave any of these questions blank. If a question doesn't apply to yo parents, write in "0."

You must give information about your parents' assets in questions 37–41. If you a giving information for only one parent and that parent has jointly owned assets, gi only that parent's portion of the assets and debts. If your parents have assets joint with someone else, give only your parents' portion of the assets and debts.

In questions 37–41, don't include:

- personal or consumer loans, or any debts that are not related to th assets listed
- the value of retirement plans (pension funds, annuities, IRAs, Keog plans, etc.)
- student financial aid

38. Home

If your parents own a *home*, write in how much the home is worth. Use the pric your parents could reasonably expect to receive for their home if it went on sa today. Don't use assessed, insured, or taxed value. A "home" includes a hous mobile home, condominium, etc. Renters write in "0."

Then write in how much is owed on the home including the present ac and related debts on the home. (Don't include interest due.) Chec th mortgage company if you don't know.

39. Other real estate and investments

If your parents own other real estate (including rental property, land, second summer homes) or have investments, write in how much they are worth toda Investments include trust funds, money market funds, mutual funds, certi cates of deposit, stocks, bonds, other securities, installment and land sa contracts (including mortgages held), commodities, precious and strateg metals, etc.

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40. Business and farm

If your parents own a business and/or farm, write in how much they are worth today. Include the value of land, buildings, machinery, equipment, livestock, inventories, etc. Don't include the home. (Home value and debt should be given in question 38.)

Then write in what is owed on the business and/or farm. Include only the present mortgage and related debts for which the business and/or farm were used as collateral.

If your parents are not the sole owners, write in only their share of the total value and debt.

Section G — Student's (& Spouse's) Asset Information

35. Mark "Yes" if you (or your spouse) meet all the following descriptions for a displaced homemaker:

- you (or your spouse) have not worked full-time in the labor force for a substantial number of years (e.g., approximately five years or more) but have during those years worked in the home providing unpaid services for family members; and
- you (or your spouse) have been dependent on public assistance or on the income of another family member but are no longer receiving that income, or you (or your spouse) are receiving public assistance because of dependent children in the home; and
- you (or your spouse) are unemployed or underemployed and are experiencing difficulty in obtaining or upgrading employment.

"Unemployed" means not working this week but being available for work. To qualify, you (or your spouse) must have made specific efforts to get a job sometime during the last four weeks.

"Underemployed" means working part-time even though you want or your spouse wants full-time employment. It refers to a condition where work is slack or only part-time work is available.

Mark "No" if neither you nor your spouse meets all the descriptions mentioned above.

Don't leave any of these questions blank. If a question doesn't apply to you, write in "0."

You must give information about your (and your spouse's) assets in questions 37–41. If you are divorced or separated and you have jointly owned assets, or if you (and your spouse) have assets owned jointly with someone else, give only your (and your spouse's) portion of the assets and debts.

In questions 37–41, don't include:

- personal or consumer loans, or any debts that are not related to the assets listed
- the value of retirement plans (pension funds, annuities, IRAs, Keogh plans, etc.)
- student financial aid

Home

If you (and/or your spouse) own a home, write in how much the home is worth. Use the price you could reasonably expect to receive for the home if it went on sale today. Don't use assessed, insured, or taxed value. A "home" includes a house, mobile home, condominium, etc. Renters write in "0."

Then write in how much is owed on the home including the present mortgage and related debts on the home. (Don't include interest due.) Check with the mortgage company if you don't know.

39. Other real estate and investments

If you (and/or your spouse) own other real estate (including rental property, land, second or summer homes) or have investments, write in how much they are worth today. Investments include trust funds, money market funds, mutual funds, certificates of deposit, stocks, bonds, other securities, installment and land sale contracts (including mortgages held), commodities, precious and strategic metals, etc.

40. Business and farm

If you (and/or your spouse) own a business and/or farm, write in how much they are worth today. Include the value of land, buildings, machinery, equipment, livestock, inventories, etc. Don't include the home. (Home value and debt should be given in question 38.)

Then write in what is owed on the business and/or farm. Include only the present mortgage and related debts for which the business and farm were used as collateral.

If you (and your spouse) are not the sole owners, write in only your (and your spouse's) share of the total value and debt.

Section H — Student's Veterans 1990-91 Educational Benefits

If you are filling out the Supplemental Information sections, you must answer 42.

42a.–42b. Your veterans "old" GI Bill and Dependents Educational Assistance Program Benefits

42a. Write in the amount of veterans "old" GI Bill (Chapter 34) and Dependents Educational Assistance Program (Chapter 35) benefits that you expect to get per month from July 1, 1990 through June 30, 1991. Don't include Death Pension, Dependency & Indemnity Compensation (DIC), or your spouse's GI Bill.

b. Write in the number of months from July 1, 1990 through June 30, 1991 that you expect to get those benefits.

If you are filling out the gray and white areas, you must answer 43.

43a.–43b. Your Veterans Contributory Benefits (VEAP)

43a. Write in the amount of Veterans Contributory Benefits (Chapter 32) that you expect to get per month from July 1, 1990 through June 30, 1991. (Include both the Government and student portions.) Don't include Death Pension, Dependency & Indemnity Compensation (DIC), or your spouse's GI Bill.

43b. Write in the number of months from July 1, 1990 through June 30, 1991 that you expect to get those benefits.

Section I — Parents' Expected 1990 Taxable & Nontaxable Income & Benefits

44. Mark "Yes" if either of your parents (for whom you are providing information) is currently certified as a "Dislocated Worker" (see page 7) by an appropriate state agency.

If you marked "Yes," you may be asked to document your parent's status as a dislocated worker.

Mark "No" if neither of your parents is certified as a dislocated worker.

Questions 45–49 ask about income and benefits your parents expect to get in 1990. If your parent is divorced, separated, or widowed, don't include information about the other parent. Answer these questions as accurately as you can. If a question doesn't apply, or if your parents don't expect to get any income or benefits from that source, write in "0."

Important Note: See the table on page 4 for the kinds of income and taxes to leave out of questions 45–49.

45. U.S. income tax to be paid for 1990

Write in the amount of income tax that your parents expect to pay in 1990. Be sure this amount doesn't include any FICA, self-employment, or other taxes.

46.& Income earned from work in 1990

47. Include wages, salaries, and tips. See Important Note above.

48. Other taxable income for 1990

Write in the total amount of other taxable income that your parents will report on their 1990 IRS Form 1040, 1040A, or 1040EZ. Include interest and dividend income and any other taxable income. Don't include any unemployment compensation or any income reported in questions 46 and 47.

49. Nontaxable income and benefits for 1990

These are the same types of income and benefits that were asked for in questions 28a-28d.

Section I — Student's (& Spouse's) Expected 1990 Taxable & Nontaxable Income & Benefits

44. Mark "Yes" if you (or your spouse) are currently certified as a "Dislocated Worker" (see page 7) by the appropriate state agency.

If you marked "Yes," you may be asked to document your status (or that of your spouse) as a dislocated worker.

Mark "No" if neither you nor your spouse is certified as a dislocated worker.

Questions 45–49 ask about income and benefits you (and your spouse) expect to get in 1990. If you are divorced, separated, or widowed, don't include information for your spouse. Answer these questions as accurately as you can. If a question doesn't apply to you, or if you don't expect to get any income or benefits from that source, write in "0."

Important Note: See the table on page 4 for the kinds of income and taxes to leave out of questions 45–49.

45. U.S. income tax to be paid for 1990

Write in the amount of income tax that you (and your spouse) expect to pay in 1990. Be sure this amount doesn't include any FICA, self-employment, or other taxes.

46.& Income earned from work in 1990

47. Include wages, salaries, and tips. See Important Note above.

48. Other taxable income for 1990

Write in the total amount of other taxable income that you (and your spouse) will report on your 1990 IRS Form 1040, 1040A, or 1040EZ. Include interest and dividend income and any other taxable income. Don't include any unemployment compensation or any income that you reported in questions 46 and 47.

49. Nontaxable income and benefits for 1990

These are the same types of income and benefits that were asked for in questions 28a-28d.

Section J — Student's Other Information

53. If you are now in high school, write in your high school six-digit code number. You can get the code from your high school counselor. If you answer this question, information on your filing status will be sent to your high school counselor.

54a. Don't include any colleges attended while still a high school student. List all the schools attended since graduation from high school. List the most recent college first. Give the month and year for the period attended. Write in the CSS code number from the list at the back of this booklet. If the code number is not listed, leave it blank.

55. Write in the two-digit code that best describes your planned course of study. Use only the codes listed below.

01 Agriculture
02 Architecture
03 Biological Science
04 Business, Commerce, Computer Science
05 Education, Teaching
06 Engineering
07 English, Journalism
08 Fine and Applied Arts
09 Foreign Language, Literature
10 Forestry, Environmental Science
11 Geography
12 Health Profession, Nursing
13 Home Economics
14 Law
15 Library Science
16 Liberal Arts
17 Math, Statistics
18 Military, Air, or Naval Service
19 Pharmacy
20 Philosophy
21 Physical or Earth Science, Chemistry
22 Psychology
23 Religion, Theology
24 Social Science, Anthropology, Sociology
25 Trade and Vocational Training
26 Political Science, Government, History
27 Communication
28 Continuing Education
29 Other/Undecided

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56. Write in the month and year you expect to complete the college degree or certificate that you will be working toward.

57. Mark your enrollment status in college from July 1, 1990 to June 30, 1991.

61. Mark "Yes" if you are currently supposed to be repaying a federal educational loan (Stafford/GSL, FISL, SLS/PLUS/ALAS, Perkins/NDSL, ICL, Consolidated Loan programs), but failed to make required payment according to the terms of your promissory note. Otherwise, mark "No." (See information on Federal Student Aid Programs on page 8.)

62. Mark "Yes" if you owe money to a college because you received an overpayment on a federal grant (Pell, SEOG, SSIG). Otherwise, mark "No."

63a. If you have a driver's license, write in the first 19 letters and/or numbers. If you don't have a driver's license, leave this question and 63b blank.

Section K — Student's Other Income

64.-67. Write in the information for the 3-month summer of 1990 and the 9-month school year of 1990-91. These are the same types of income and benefits asked for in questions 46-49.

Section L — Student's Expected Other Veterans Benefits

68. Other veterans benefits

Write in the amount of other veterans benefits that you will get per month. Include benefits from:

- Selective Reserve pay (Montgomery GI Bill - Chapter 106)
- New GI Bill (Montgomery GI Bill - Chapter 30)
- Vocational Rehabilitation (Chapter 31)
- REPS (Restored Entitlement Program for Survivors - Section 156)

Don't include any benefits reported in question 42 or 43.

Section M — Family Members' Listing

69. If Section B instructed you to complete the gray and white areas of the form, give information for all family members included in question 20. Otherwise, give information for all family members included in question 18.

Section N — Parents' Other Information

72. See the instructions for 39 for a definition of investments.

73. Use 73a-73f to show the breakdown of income in question 24.

Section O — Divorced, Separated, or Remarried Parents

This section is to be filled out by the parent who is completing this form if the student's natural or adoptive parents are divorced or separated.

Section P — Stafford (GSL) Loan Information

You are encouraged to answer the questions in this section even if you don't think you want a Stafford (GSL) Loan. Answering these questions does not commit you to accept a Stafford Loan nor does it guarantee that you are eligible for a Stafford Loan. It simply provides most colleges with the information they need to offer you a complete package of financial aid resources that you can either accept or reject. If you should later decide to borrow, answering these questions now may avoid unnecessary delays in getting the financial aid you need.

For additional information on Stafford Loans see Who Can Get Aid from the Five Federal Student Financial Aid Programs on page 2.

76a. Complete the following worksheet to answer this question. Include only Stafford/GSL Loans or Federally Insured Student Loans (FISL). Don't include Supplemental Loans for Students (SLS), Auxiliary Loans to Assist Students (ALAS), Perkins Loans, or PLUS loans. If you have attended more than one college, include all Stafford Loans (GSLs) that you received at each. If you have received more than one loan during the school year, be sure to include the total amount borrowed for the year. If you have made any payments, enter only the unpaid balance of the loan(s) rather than the amount borrowed. If you have never received a Stafford Loan (GSL) or if you have repaid all your Stafford Loans (GSLs), write in "0."

Worksheet for Question 76a

Year in school	**Unpaid loan amount**
1st year	$ .00
2nd year	+ .00
3rd year	+ .00
4th year	+ .00
5th year or more (undergraduate)	+ .00
Graduate or professional (1st year and beyond)	+ .00
Total unpaid balance	$ .00
(This is your answer for question 76a.)	

76b.-76e. These questions refer to your most recent GSL. Skip these questions if you answered "0" to question 76a.

For question 76c, select the interest rate of your most recent loan. See your promissory note if you are unsure. The choice of "8/10%" means that the loan has an interest rate of 8% for the first four years of repayment and 10% after that.

Section Q — Student's Colleges & Programs

77. Give the full name, CSS code number, and housing code for each college and program to which you want CSS to send information from this FAF. Be sure to include the college(s) that you listed in question 29. Don't list federal student financial aid programs. You must list at least one college or program. Be sure you enclose the right fee.

You can list up to eight colleges and programs in this question. If you war [illegible] re than eight colleges or programs to receive your FAF information, list t [illegible] h your name and social security number on a separate sheet of paper. I [illegible] o include $8.75 for each additional college. The eight colleges that you lis [illegible] is question will be processed first and will appear on your first Acknowledgment. Processing for more than eight colleges will be delayed approximately 2-3 weeks and will take place after the first eight have been processed. You will receive a second Acknowledgment for any additional colleges that you list.

You will find the code numbers in the CSS code list at the back of this booklet. Colleges on the code list are listed alphabetically within the state in which they are located. If a state has one or more state scholarship programs, they are printed at the beginning of the state's listing in bold type. A dash (—) to the left of a college means that it is a campus or branch of a college or university system.

The inclusion of a college on the CSS code list doesn't necessarily mean that the college requires the FAF. Check with the college if you're not sure. Be sure to use only CSS code numbers in question 77. If you use a wrong code number, your FAF will be sent to the wrong college. If you can't find a code number for a college, be sure that the college needs a copy of your FAF. Then, write in the name and city and state of the college, but leave the space for the CSS code number blank. CSS will write in the code number for you.

Write in the housing code that best describes where you plan to live while attending college during 1990-91. If you are considering more than one college, answer this question, regarding living arrangements, for each college you list. Answer "With parents" if you will live with one or both of your parents while you are attending college during 1990-91. Answer "Campus housing" if you will live in housing controlled by the college you will attend. Answer "Off-campus housing" if you will not be living with your parents, in campus housing, or with relatives (other than a spouse or children) while attending college. Answer "With relatives" if you will live with relatives other than your parents, spouse, or children.

78. Mark the box that tells how many colleges and programs are listed in question 77. Make out your check or money order for the correct fee to the College Scholarship Service. If you send a check that the bank won't accept, you will be charged an additional $5.00 fee. Checks must not be written on foreign banks; students outside the U.S. (except for Canada and U.S. possessions) should use an international money order. Send the fee with your FAF to CSS. [illegible] staple your check or money order to your FAF.) The FAF will be retur[illegible] you if no fee is enclosed.

Double-check your FAF to make sure it is complete and accurate. Make a copy of the completed FAF for your records. Send the original form to CSS. Don't send a photocopy. Photocopies can't be processed and will be returned. Keep this booklet handy. You will need it later.

SPECIAL INSTRUCTIONS/DEFINITIONS

Dislocated Worker—To be considered a dislocated worker, you must be currently certified as one by a state agency such as your local employment service or job service. This certification is done in accordance with Title III of the Job Training Partnership Act. A dislocated worker generally means a person who

- has been terminated or laid off or has received a notice of termination or lay-off,
- has been terminated or received a notice of termination as a result of permanent closure of a plant or other facility, or
- was self-employed (including farmers) but is now unemployed because of poor economic conditions in the community or a natural disaster.

Foreign Tax Return—If you, your spouse, and/or your parents won't be filing a U.S. income tax return in 1989 (e.g., Puerto Rican tax filers), follow the instructions below:

- In question 22, mark box "2" ("From a completed IRS Form 1040") if a foreign tax return has been filed, or mark box "4" ("estimated. Will file IRS Form 1040") if a foreign tax return will be filed;
- use the information from the tax return to fill out this form;
- convert all figures to U.S. dollars, using the exchange rate in effect today; and
- fill out all sections of the form.

Legal Guardian—A legal guardian is a person whom a court has:

- appointed to be your legal guardian, and this legal relationship will continu [illegible] June 30, 1991, and
- directed to support you with his or her own financial resources.

Native American—If you are a Native American, report the amount of income and assets over $2,000 per individual payment that you, your spouse, and/or your parents received in 1989 from the Per Capita Act or the Distribution of Judgment Funds Act. If $2,000 or less per individual payment was received from either of these Acts, don't report it. Don't report funds received as an award under the Alaska Native Claims Settlement Act or the Maine Indian Claims Settlement Act.

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WORKSHEET I

Worksheet for question 24

Wages, salaries, tips, etc.		$ .00
Interest income		+ .00
Dividends		+ .00
Other taxable income (alimony received, business and farm income, capital gains — see instructions for question 24, pensions, annuities, rents, unemployment compensation, social security, Railroad Retirement, and all other taxable income)		+ .00
Add all the numbers in the column.		= .00
Subtract IRS allowable adjustments to income (payments to IRA and Keogh plans, interest penalty on early withdrawal of savings, and alimony paid)		− .00
This is your answer for question 24.	TOTAL	$ .00

WORKSHEET II

Untaxed Income and Benefits Worksheet

Amounts from IRA tax forms	**For question 28d Parents**	**For question 28d Student & Spouse**
Deductible IRA and/or Keogh payments from Form 1040, total of lines 24, 25, and 27 or 1040A, line 12c	$ .00	$ .00
Earned income credits from Form 1040, line 58, or 1040A, line 25b	+ .00	+ .00
Untaxed portions of pensions from Form 1040, line 16a minus 16b, and line 17a minus 17b (excluding "rollovers")	+ .00	+ .00
Credit for federal tax on special fuels from Form 1040, line 61	+ .00	+ .00
Foreign income exclusion from Form 2555, line 39	+ .00	+ .00
Tax-exempt interest income from Form 1040, line 8b, or 1040A, line 8b	+ .00	+ .00
Other Untaxed Income and Benefits		
Payments to tax-deferred pension and savings plans (paid directly or withheld from earnings). Include 401(k) and 403(b) plans.	+ .00	+ .00
Welfare benefits (except AFDC/ADC, which you should have reported in question 28b)	+ .00	+ .00
Workers Compensation	+ .00	+ .00
Veterans noneducational benefits such as Death Pension and Dependency and Indemnity Compensation (DIC), etc.	+ .00	+ .00
Housing, food, and other living allowances (excluding rent subsidies for low-income housing) paid to members of the military, clergy, and others (include cash payments and cash value of benefits.)	+ .00	+ .00
Cash support or any money paid on your behalf	XXXXXXXXXXXXXXX	+ .00
Any other untaxed income and benefits, such as Black Lung Benefits, Refugee Assistance, untaxed portions of Railroad Retirement benefits, or Job Training Partnership Act noneducational benefits	+ .00	+ .00
This is your answer for question 28d. TOTAL	$ .00	$ .00

Don't include:

- Social security benefits
- Any income reported elsewhere on the form
- Money from student financial aid
- Food stamps
- "Rollover" pensions
- Gifts and support, other than money, received from friends or relatives
- Veterans educational benefits (GI Bill, Dependents Educational Assistance Program, VA Vocational Rehabilitation Program, VA Contributory Benefits, etc.)

We urge you to keep these worksheets. Don't send them in with your FAF. You may be asked to refer to them later to verify the information on your form. (It may also help you to show that your SAR/Acknowledgment is accurate.)

ADDITIONAL INFORMATION ON FEDERAL STUDENT FINANCIAL AID PROGRAMS

Where can I get additional information?

Write to Federal Student Aid Information Center, P.O. Box 84, Washington, D.C. 20044, and ask for a free copy of *The Student Guide: Financial Aid from the U.S. Department of Education — Grants, Loans, and Work-Study 1990-91.*

How do I get aid from these federal student financial aid programs?

Fill out the FAF, mark "Yes" to question 30a, and send it to CSS with the correct fee. Your form must be received by May 1, 1991, but not before January 1, 1990. The sooner you send it in, the better. CSS will send your information to the U.S Department of Education (U.S.E.D.).

What happens after I mail in my form?

Within four to six weeks after you mail in this form, CSS (under contract to the U.S. Department of Education) will send you a Student Aid Report (SAR). On the SAR will be either a request for further information or numbers called a Pell Grant Index (PGI) and a Family Contribution (FC). Formulas established by law are used to figure these numbers from the information you give us. Your school or the U.S. Department of Education may ask you to prove that the information you give on your application is true.

If you don't get a SAR within four to six weeks, or if you need another copy of your SAR, write to: Federal Student Aid Programs, College Scholarship Service, P.O. Box 6376, Princeton, NJ 08541-6376. Give your name, address, social security number, and date of birth, and ask for a copy of your 1990-91 SAR. If your address has changed since you sent in your FAF, be sure to give your old and new addresses. Be sure to sign your letter.

What is my Pell Grant Index (PGI)?

The PGI (formerly Student Aid Index) is a number that tells whether you may be able to get a Pell Grant. If you are eligible for a Pell Grant, your school will use this number to determine the amount of your award. Even if you don't qualify for a Pell Grant, you may still qualify for one or more of the other four federal programs. Be sure to ask your financial aid administrator if your school needs any additional information from you for these other four programs.

What is my Family Contribution (FC)?

The FC is a number that helps your financial aid administrator determine if you are able to get one of the several available forms of assistance. These include Stafford Loan (GSLs), SEOG, CWS, and Perkins Loan. Your school will use this number to determine the amount of your grant, loan, or work-study award.

What if my situation changes?

Questions 11, 15, 18-19 (blue area), and 20-21 (gray area) ask you to make projections for the coming year. If your answers to these questions change, wait until you receive your SAR and then see your financial aid administrator.

The income and expense information that you give must be accurate and must match what is or will be on your 1989 income tax forms. However, if your financial situation recently changed, contact your financial aid administrator.

Information on the Privacy Act and Use of Your Social Security Number

The Privacy Act of 1974 requires that each federal agency that asks for your social security number or other information must tell you the following:

- its legal right to ask for the information and whether the law says you must give
- what purpose the agency has in asking for it and how it will be used
- what could happen if you do not give it

You must give your social security number to apply for federal student aid. The U.S. Department of Education's legal right under the Title IV programs to require that you provide us with your social security number is based on Section 484(a)(4) of the Higher Education Act of 1965, as amended. The social security number is used under the Pell Grant, Supplemental Educational Opportunity Grant, and College Work-Study programs in recording information about your college attendance and progress and in making sure you have received your money. The social security number is also used under the Stafford (GSL) and Perkins Loan programs to identify the applicant, to determine program eligibility and benefits, and to permit servicing and collecting of the loans.

If you are applying for federal student aid only, you must fill out everything except questions 29, 30b, 31, and 50-76. If you skip question 30b, we will count your answer as "No" for both parts of that question. If you are applying for a Pell Grant only, you can skip questions 5, 36, and 43.

The authority to request all other information (except the social security number) is based on Sections 411A, 411B, 411C, 411D, 411F, 474, 475, 476, 477, 479, and 480 of the Higher Education Act of 1965, as amended. This information is used to determine the amount of federal student aid for which you may be qualified.

The information you supplied may be disclosed to third parties that the Department has authorized to assist in administering federal student aid programs. This may be accomplished through computer matching programs such as the ones currently conducted with the Selective Service and the Immigration and Naturalization Service.

We will provide your name, address, social security number, date of birth, student aid indices, student status, year in college, and state of legal residence to the college(s) that you list in question 29 (or their representatives), even if you mark "No" to the "college(s)" part of question 30b. This information also will go to the state scholarship agency in your state of legal residence to help coordinate state financial aid programs with federal student aid programs. Also, we may send information to members of Congress if you ask them to help you with federal student aid questions. If your parents or your spouse provided information on the form, they may also request to see all the information on the application. If the Department or an employee of the Department is involved in litigation, we may send information to the Department of Justice if disclosure is related to financial aid and certain other conditions are met. We may also use the information for any purpose that is a "routine use" listed in Appendix B Part 5b of Title 34 of the Code of Federal Regulations (CFR).

Special note about the above statement: The above information tells you that, in some cases, you can skip certain questions on the FAF. However, you should be aware that if you want colleges and programs to get information from your FAF, you must complete question 77.

Although the information you give on the FAF is confidential, if a subpoena is received that requests your FAF information, the information will be provided.

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CSS Code List

See Instructions for question 77 (page 7) before using this list.

ALABAMA

[illegible]

ALASKA

[illegible]

ARIZONA

[illegible]

ARKANSAS

[illegible]

CALIFORNIA

[illegible]

COLORADO

[illegible]

CONNECTICUT

[illegible]

DELAWARE

[illegible]

DISTRICT OF COLUMBIA

[illegible]

FLORIDA

[illegible]

GEORGIA

[illegible]

HAWAII

[illegible]

IDAHO

[illegible]

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[illegible] Lewis-Clark State College
[illegible] North Idaho College
[illegible] Northwest Nazarene College
[illegible] Ricks College
[illegible] University of Idaho, Moscow

ILLINOIS

[illegible] Augustana College
1027 Aurora University
[illegible] Barat College
[illegible] Belleville Area College
[illegible] Black Hawk College, Moline
[illegible] Blackburn College
1070 Bradley University
1113 Chicago Coll. Osteopathic Medicine
1316 Chicago-Kent College of Law
1110 Chicago State University
[illegible] College of Lake County
[illegible] College of Saint Francis
[illegible] Columbia College
[illegible] Concordia College
[illegible] DePaul University
[illegible] Devry, Inc.
Devry Institute of Technology:
Chicago
1171 —[illegible]
[illegible] —[illegible]
[illegible] —[illegible]
[illegible] —[illegible]
[illegible] Dr. William M. Scholl College of Podiatric Medicine
[illegible]

INDIANA

[illegible]

IOWA

[illegible]

KANSAS

[illegible]

KENTUCKY

[illegible]

LOUISIANA

[illegible]

MAINE

[illegible]

MARYLAND

[illegible]

MASSACHUSETTS

[illegible]

MICHIGAN

[illegible]

MINNESOTA

[illegible]

MISSISSIPPI

[illegible]

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[illegible]

MISSOURI

[illegible]

MONTANA

[illegible]

NEBRASKA

[illegible]

NEVADA

[illegible]

NEW HAMPSHIRE

[illegible]

NEW JERSEY

[illegible]

NEW MEXICO

[illegible]

NEW YORK

[illegible]

NORTH CAROLINA

[illegible]

NORTH DAKOTA

[illegible]

OHIO

[illegible]

OKLAHOMA

[illegible]

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FAF® Financial Aid Form — School Year 1990-91

Warning: If you use this form to establish eligibility for federal student aid and you purposely give false or misleading information, you may be subject to a $10,000 fine, a prison sentence, or both.

Do not write in this space.

SC 3

Use only a No. 2 (soft lead) pencil. Don't write outside of the boxes or answer spaces. "You" and "your" on this form always means the student who wants aid.

Section A — Student's Identification Information

1. Your name ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Last ☐☐☐☐☐☐☐☐☐☐ First ☐ M.I.

2. Your permanent mailing address (Mail will be sent to this address. See page 2 for state/country abbreviation.)
Number, street, and apartment number
City State Zip Code

3. Your title (optional) 1☐ Mr. 2☐ Miss, Ms., or Mrs.

4. Your state of legal residence ☐☐

5. Your social security number ☐☐☐-☐☐-☐☐☐☐

6. Your date of birth ☐☐ Month ☐☐ Day ☐☐ Year

7. Are you a U.S. citizen? (Mark only one box.)
1☐ Yes, I am a U.S. citizen.
2☐ No, but I am an eligible noncitizen. (See the instructions on page 2.)
A☐☐☐☐☐☐☐☐☐
3☐ No, neither of the above. (See the instructions on page 3.)

8. As of today, are you married? (Mark only one box.)
1☐ I am not married. (I am single, divorced, or widowed.)
2☐ I am married.
3☐ I am separated from my spouse.

9. What year will you be in college in 1990-91? (Mark only one box.)
1☐ 1st (never previously attended college)
2☐ 1st (previously attended college)
3☐ 2nd
4☐ 3rd
5☐ 4th
6☐ 5th or more undergraduate
7☐ first year graduate/professional (beyon a bachelor's degree
8☐ continuing graduate or professional

10. Will you have your first bachelor's degree before July 1, 1990? Yes ☐1 No ☐

Section B — Student Status

11. a. Were you born before January 1, 1967? Yes ☐1 No ☐2
b. Are you a veteran of the U.S. Armed Forces? Yes ☐1 No ☐2
c. Are you a ward of the court or are both your parents dead? Yes ☐1 No ☐2
d. Do you have legal dependents (other than a spouse) that fit the definition in the instructions on page 3? Yes ☐1 No ☐2

- If you answered "Yes" to any part of question 11, go to Section C and fill in the GRAY and the WHITE areas on the rest of the form. Some colleges may also as you to complete the BLUE areas. (Skip questions 12 through 15.)
- If you answered "No" to every part of question 11 and you are:
  —unmarried now (single, divorced, separated, or widowed) and will be an undergraduate student in 1990-91, answer question 12. (Skip question 15.)
  —married now or will be a graduate/professional student in 1990-91, answer questio 15. (Skip questions 12 through 14d.)

Unmarried Undergraduate Students Only

12. Did your parents claim you as an income tax exemption ...in 1988? Yes ☐1 No ☐2 ...in 1989? Yes ☐1 No ☐2

- If you answered "Yes" to either year in question 12, go to Section C and fill in th BLUE and the WHITE areas on the rest of the form. (Skip questions 13 throug
- If you answered "No" to both years in question 12, answer question 13 below.

13. Beginning with the 1987-88 school year, when did you first receive federal student financial aid? (Mark only one box. See instructions on page 3.)

1☐ During the 1987-88 school year → (Answer 14a only. Skip questions 14b, 14c, and 14d.)
14. a. Did you have total resources of $4,000 or more, not including parents' support ...in 1985? Yes ☐1 No ☐2 ...in 1986? Yes ☐1

2☐ During the 1988-89 school year → (Answer 14b only. Skip questions 14a, 14c, and 14d.)
14. b. Did you have total resources of $4,000 or more, not including parents' support ...in 1986? ☐1 ☐2 ...in 1987? ☐1

3☐ During the 1989-90 school year → (Answer 14c only. Skip questions 14a, 14b, and 14d.)
14. c. Did you have total resources of $4,000 or more, not including parents' support ...in 1987? ☐1 ☐2 ...in 1988? ☐1

4☐ In neither 1, nor 2, nor 3. → (Answer 14d only. Skip questions 14a, 14b, and 14c.)
14. d. Did you have total resources of $4,000 or more, not including parents' support ...in 1988? ☐1 ☐2 ...in 1989? ☐1 ☐2

After you answer 14a, 14b, 14c, or 14d, follow the instructions at the right.

- If you answered "No" to either year in question 14a, 14b, 14c, or 14d, go to Section C and fill in the BLUE an the WHITE areas on the rest of the form.
- If you answered "Yes" to both years in question 14a, 14b, 14c, or 14d, go to Section C and fill in the GRAY an the WHITE areas on the rest of the form. Some colleges may also ask you to complete the BLUE areas.

Married Students or Graduate/Professional Students Only

15. Will your parents claim you as an income tax exemption in 1990? Yes ☐1 No ☐2

- If you answered "Yes" to question 15, go to Section C and fill in the BLUE and the WHITE areas on the rest of the form.
- If you answered "No" to question 15, go to Section C and fill in the GRAY and the WHITE areas on the rest of the form. Some colleges may also ask you to complete the BLUE areas.

Section C — Household Information

Parents

16. What is your parents' current marital status? (Mark only one box.)
1☐ single
2☐ married
3☐ separated
4☐ divorced
5☐ widowed

17. What is your parents' state of legal residence? ☐☐

18. Number of family members in 1990-91 ☐☐
Write in the total number of people your parents will support in 1990-91. Always include yourself (the student) and your parents. Include your parents' other children and other people only if they meet the definition in the instructions on page 3.

1. Number of college students in 1990-91 ☐
Of the number in 18, write in the number of family members who will be in college at least half-time. Include yourself — the student who is applying for aid.

Student (and Spouse)

20. Number of family members in 1990-91 ☐☐
Write in the total number of people that you will support in 1990-91. Include yourself and your spouse. Include your children and other people only if they meet the definition in the instructions on page 3.

21. Number of college students in 1990-91 ☐
Of the number in 20, write in the number of family members who will be in college at least half-time. Include yourself.

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(Mark only one box.)

from a completed IRS Form 1040. (Go to 23.)	2☐		2☐
estimated. Will file IRS Form 1040EZ or 1040A. (Go to 23.)	3☐		3☐
estimated. Will file IRS Form 1040. (Go to 23.)	4☐		4☐
a tax return will not be filed. (Skip to 26.)	5☐		5☐

Tax Filers Only

23. 1989 total number of exemptions (IRS Form 1040 — line 6e, 1040A — line 6e, or 1040EZ — see instructions on page 4)		23. ☐☐		23.	☐☐
24. 1989 income from IRS Form 1040 — line 31, 1040A — line 13, or 1040EZ — line 3 (See instructions on page 4.)		24. $ .00		24.	$ .00
25. 1989 U.S. income tax paid (IRS Form 1040 — line 47, 1040A — line 22, or 1040EZ — line 7)		25. $ .00		25.	$ .00
26. 1989 income earned from work by	Father	26. $ .00	Student	26.	$ .00
27. 1989 income earned from work by	Mother	27. $ .00	Spouse	27.	$ .00
28. 1989 untaxed income and benefits (yearly totals only)					
a. Social security benefits		28a. $ .00		28a.	$ .00
b. Aid to Families with Dependent Children (AFDC or ADC)		b. $ .00		b.	$ .00
c. Child support received for all children		c. $ .00		c.	$ .00
d. Other untaxed 1989 income and benefits from Worksheet II on page 8 of the instructions		d. $ .00		d.	$ .00

Section E — Federal Student Aid Releases and Certification

29. What college(s) do you plan to go to in 1990-91?

Name	City and State	CSS Code No.

30. a. Do you give CSS permission to send information from this form to the U.S. Department of Education? (Mark "Yes" if you want to be considered for a Pell Grant and other federal student financial aid. If you answer "No," skip 30b and 31.) Yes ☐1 No ☐2

30. b. Do you give the U.S. Department of Education permission to send information from this form to:

— the financial aid agency in your state? Yes ☐1 No ☐2

— the college(s) you named in 29 (or its representative)? Yes ☐1 No ☐2

Note: By marking "Yes" you are not applying for state and institutional aid in most states. Most agencies and colleges also require that a CSS report be sent to them. See instructions.

31. Mark this box if you give Selective Service permission to register you. (See instructions.) ☐

32. Certification: All of the information on this form and the Supplemental Information, if completed, is true and complete to the best of my knowledge. If asked by an authorized official, I agree to give proof of the information that I have given on this form and the Supplemental Information, if completed. I realize that this proof may include a copy of my U.S., state, or local income tax return. I also realize that if I don't give proof when asked, the student may be denied aid.

Everyone giving information on this form must sign below.

1 ____________________ Student's signature

2 ____________________ Student's spouse's signature

3 ____________________ Father's signature

4 ____________________ Mother's signature

Date this form was completed:

☐☐ Month ☐☐ Day 1 ☐ 1990 2 ☐ 1991 Year

Write in the month and day. Mark the year completed.

IMPORTANT: — You must read the instructions on page 5 to see if you need to fill out Sections F through L.

SUPPLEMENTAL INFORMATION

Section F — 1989 Expenses

	Parents	Student (and Spouse)
33. 1989 medical and dental expenses not paid by insurance	33. $ .00	33. $ .00
34. 1989 elementary, junior high, and high school tuition for dependent children a. Amount paid (Don't include tuition paid for the applicant.)	34a. $ .00	34a. $ .00
b. For how many dependent children? (Don't include the applicant.)	b. ☐	b. ☐

Section G — Asset Information

If you are completing this section, you must fill out the Student (and Spouse) columns below.

	Parents		Student (and Spouse)	
35. Is either of your parents a displaced homemaker? (See instructions on page 5.)	35. Yes ☐1 No ☐2		35. Are you or is your spouse a displaced homemaker? (See instructions on page 6.) Yes ☐1 No ☐2	
36. Write in the age of your older parent.	36. ☐☐		36. XXXXXXXXXXXXXXX	
	What is it worth today?	What is owed on it?	What is it worth today?	What is owed on it?
37. Cash, savings, and checking accounts	37. $ .00	XXXXXXXXXXXXXXX	37. $ .00	XXXXXXXXXXXXXXX
38. Home (Renters write in "0.")	38. $ .00	$ .00	38. $ .00	$ .00
39. Other real estate and investments	39. $ .00	$ .00	39. $ .00	$ .00
40. Business and farm	40. $ .00	$ .00	40. $ .00	$ .00
41. Does any part of 40 include a farm?	41. Yes ☐1 No ☐2		41. Yes ☐1 No ☐2	

Section H — Student's Veterans Educational Benefits

(Expected Amount July 1, 1990 – June 30, 1991) (If you are completing this section, you must answer question 42. If you are filling out the gray and white areas, you must also answer question 43.)

42. Your veterans "old" GI Bill & Dependents Educational Assistance Benefits

a. Amount per month $ .00 b. Number of months ☐☐

43. Your VA Contributory Benefits (VEAP)

a. Amount per month $ .00 b. Number of months ☐☐

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Print your name Last ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ First ☐☐☐☐☐☐☐☐☐☐☐

Section I — Expected 1990 Taxable & Nontaxable Income & Benefits

(You must see the instructions for income and taxes that you should exclude from questions 45 through 48.)

If you are completing this section, you must fill out the Student (and Spouse) column below.

	— Parents —		— Student (and Spouse) —
44. Is either parent certified as a dislocated worker by the appropriate agency? (See instructions on page 6.)	44. Yes ☐1 No ☐2	Are you or is your spouse certified as a dislocated worker by the appropriate agency? (See instructions on page 6.)	44. Yes ☐1 No ☐2
45. 1990 U.S. income tax to be paid	45. $ .00		45. $ .00
46. 1990 income earned from work by Father	46. $ .00	Student	46. $ .00
47. 1990 income earned from work by Mother	47. $ .00	Spouse	47. $ .00
48. 1990 other taxable income	48. $ .00		48. $ .00
49. 1990 nontaxable income and benefits (See instructions on page 6.)	49. $ .00		49. $ .00

Section J — Student's Other Information

50. Your home telephone ☐☐☐ - ☐☐☐ - ☐☐☐☐ (Area Code) (Number)

51. Date you began living in your state of legal residence Month ☐☐ Year ☐☐

52. If you have dependents other than a spouse, how many will be in each of the following age groups during 1990-91? Ages 0-5 ☐ Ages 6-12 ☐ Ages 13+ ☐

53. If you are now in high school, give your high school 6-digit code number. ☐☐☐☐☐☐

54. a. List all colleges or schools that you have attended since high school. Always list first the college or school most recently attended.

Name, city, and state of college	Period of attendance From (mo./yr.)	To (mo./yr.)	CSS Code Number

b. If you have attended more than three colleges or schools, mark here. Give names and CSS code numbers in Section R. ☐

55. Your course of study code (See instructions.) ☐☐

56. Date you expect to complete your current college degree/certificate Month ☐☐ Year ☐☐

57. Your expected enrollment status during the 1990-91 school year (Mark only one box.)
1 ☐ Full-time 2 ☐ At least half-time but less than full-time 3 ☐ Less than half-time

58. During the 1990-91 school year, you want financial aid from ☐☐ Month ☐☐ Year through ☐☐ Month ☐☐ Year

59. Mark your preference for work or loan assistance.
1 ☐ Part-time job only 3 ☐ Loan only
2 ☐ Part-time job and loan 4 ☐ No preferenc

60. a. Your Occupation/Employer ____________________

b. Employer's Address ____________________

c. Will you continue to work for this employer during the 1990-91 school year? Yes ☐1 No ☐

61. Are you currently in default on an educational loan? (See instructions.) Yes ☐1 No ☐

62. Do you owe a refund on a federal grant? (See instructions.) Yes ☐1 No ☐

63. a. Your driver's license number ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

b. State that issued the above driver's license number State ☐

Section K — Student's Other Income

(See instructions for the kinds of income to exclude.)

	Summer 1990 3 months	School Year 1990-91 9 months
64. Income earned from work by you	$ .00	$ .00
65. Income earned from work by your spouse	$ .00	$ .00
66. Other taxable income	$ .00	$ .00
67. Nontaxable income and benefits	$ .00	$ .00

Section L — Student's Expected Other Veterans Benefit

(July 1, 1990 – June 30, 1991)

68. Other benefits administered by the Veterans Administration (Read page 7 of instructions. Don't include any benefits you already reported in 42 or 43.)

Amount per month $ .00 Number of months ☐☐

Section M — Family Members' Listing

Give information for all family members included in 18 or 28. You are already listed on line 1. List up to seven other family members here. If more than seven, list first those who will be in college at least half-time. List those over seven in Section R.

69.

	Full name of family member	Age	Relationship (Use code below)	Will attend college at least half-time in 1990-91 school year? Yes	No	Name of school or college this person will attend in 1990-91 school year	Year in school 1990-91	Occupation/Employer of this person	If attended same school in 1989-90, give amount of: 1989-90 Scholarships/Grants	1989-90 Parents' Contribution
1	You — the Student Applicant									
2				1 ☐	2 ☐					
3				1 ☐	2 ☐					
4				1 ☐	2 ☐					
5				1 ☐	2 ☐					
6				1 ☐	2 ☐					
				1 ☐	2 ☐					
8				1 ☐	2 ☐					

Write in the correct code from the right.
1 = Student's parent
2 = Student's stepparent
3 = Student's brother or sister
4 = Student's husband or wife
5 = Student's son or daughter
6 = Student's grandparent
7 = Other (Explain in Section R.)

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Section N — Parents' Other Information

70. Parents' monthly home mortgage/rental payment (if none, explain in Sect. R.) $ ____ .00

71. If parents own a home, give a. year purchased 1 9 _ _ b. purchase price $ ____ .00

72. If parents included investments in 38, give their worth today. $ ____ .00

73. Breakdown of 1989 income in 24 (Tax Filers Only)

a. Wages, salaries, tips (IRS 1040—line 7, 1040A—line 7, or 1040EZ—line 1) a. $ ____ .00

b. Interest income (IRS 1040—line 8a, 1040A—line 8a, or 1040EZ—line 2) b. $ ____ .00

c. Dividend income (IRS 1040 — line 9, or 1040A — line 9) c. $ ____ .00

d. Net income (or loss) from business, farm, rents, royalties, partnerships, estates, trusts, etc. (IRS 1040 — lines 12, 18, and 19) If a loss, enter the amount in (parentheses). d. $ ____ .00

e. Other taxable income such as alimony received, capital gains (or losses), pensions, annuities, etc. (IRS 1040—lines 10, 11, 13-15, 16b, 17b, 20, 21b, and 22, or 1040A—line 10) e. $ ____ .00

f. Adjustments to income (IRS 1040 — line 30, or 1040A — line 12c) f. $ ____ .00

g. Total (Add 73a–73e minus 73f.) This is your answer to 24. ⟶ g. $ ____ .00

Section O — Divorced, Separated, or Remarried Parent

(To be answered by the parent who completes this form, if the student's natural or adoptive parents are divorced or separated.)

74. a. Year of separation _ _ Year of divorce _ _

b. Other parent's name ____________

Home address ____________

____

Occupation/Employer ____________

c. According to court order, when will support for the student end? Month _ _ Year _ _

d. Who claimed the student as a tax exemption for 1989? ____________

e. Is there an agreement specifying a contribution for the student's education? Yes ☐1 No ☐2

If yes, how much for the 1990-91 school year? $ ____ .00

Section P — Stafford (GSL) Loan Information (Read the instructions on page 7.)

75. If it is necessary to borrow money to pay for educational expenses, do you want to be considered for a Stafford Loan? Yes ☐1 No ☐2

(If you marked "Yes," answer 76a–e. Your information may be sent to the appropriate loan agency. If you marked "No," go to 77. Skip 76.)

76. Stafford (GSL) Loan information

a. Total unpaid balance on all your Stafford (GSL) Loans $ ____ .00

b. Total unpaid balance on your most recent Stafford (GSL) Loan $ ____ .00

c. Interest rate of your most recent Stafford (GSL) Loan (Mark only one box.) 1 ☐ 7% 2 ☐ 8% 3 ☐ 9% 4 ☐ 8/10%

d. Loan period of your most recent Stafford (GSL) Loan from _ _ Month _ _ Year through _ _ Month _ _ Year

e. Class level in which you received the most recent Stafford (GSL) Loan (Give number code from below.) ☐

1 = Freshman	4 = Senior	7 = Second year graduate/professional
2 = Sophomore	5 = Fifth year undergraduate	8 = Third year graduate/professional
3 = Junior	6 = First year graduate/professional	9 = Beyond third year graduate/professional

Section Q — Student's Colleges & Programs

77. List the names and CSS code numbers of the colleges and programs to which you want CSS to send information from this form. Give the correct housing code. Don't list federal student aid programs. Be sure to include the college(s) you listed in 23. Enclose the right fee. See the instructions and 78.

Name	City and State	CSS Code No.	Housing Code*

*Housing Codes for 1990-91 (Enter only one code for each college.):
1 = With parents 2 = Campus housing 3 = Off-campus housing 4 = With relatives

78. Fee: Mark the box that tells how many colleges and programs are listed in 77

1 ☐ $8.75 2 ☐ $15.50 3 ☐ $22.25 4 ☐ $29.00 5 ☐ $35.75 6 ☐ $42.50 7 ☐ $49.25 8 ☐ $56.00

Mail this form with a check or money order for the right amount made
College Scholarship Service. This form will be returned to you if no fee is

Section R — Explanations/Special Circumstances

Use this space to explain any unusual expenses, educational and other debts, or special circumstances.

31

Section S — State of South Carolina Questions

79. Students who are attending or planning to attend college in South Carolina must answer a–e below.

a. If you know you want a Stafford Loan and you know the amount you wish to borrow, write in that amount here. (If you are not sure, leave this question blank.) $ ____ .00

b. Have you ever applied for a loan through the South Carolina Student Loan Corporation? Yes ☐1 No ☐2

c. Have you ever borrowed money or had credit? (Don't include educational loans.) Yes ☐1 No ☐2

d. Write in the number for your county of permanent residence. (Use the appropriate number code from the list below.) _ _

01-Abbeville
02-Aiken
03-Allendale
04-Anderson
05-Bamberg
06-Barnwell
07-Beaufort
08-Berkeley
09-Calhoun
10-Charleston
11-Cherokee
12-Chester
13-Chesterfield
14-Clarendon
15-Colleton
16-Darlington
17-Dillon
18-Dorchester
19-Edgefield
20-Fairfield
21-Florence
22-Georgetown
23-Greenville
24-Greenwood
25-Hampton
26-Horry
27-Jasper
28-Kershaw
29-Lancaster
30-Laurens
31-Lee
32-Lexington
33-McCormick
34-Marion
35-Marlboro
36-Newberry
37-Oconee
38-Orangeburg
39-Pickens
40-Richland
41-Saluda
42-Spartanburg
43-Sumter
44-Union
45-Will rg
46-Yr
50-O

South Carolina offers a loan program to assist residents planning to teach in the state. Check with your fin office for details concerning eligibility requirements or contact the South Carolina Student Loan Corporation, P.O. Bo 21487, Columbia, South Carolina 29221.

e. Have you applied or do you intend to apply for a South Carolina Teacher Loan? Yes ☐1 No ☐

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1990-91
SOUTH CAROLINA
TUITION GRANT APPLICATION

S.C. TUITION GRANTS COMMISSION

411 Keenan Building
P.O. Box 12159
Columbia, South Carolina 29211
Phone (803) 734-1200

READ ALL INSTRUCTIONS ON THE BACK PAGE CAREFULLY BEFORE COMPLETING THIS APPLICATION. INCOMPLETE APPLICATIONS WILL BE RETURNED TO THE APPLICANT FOR COMPLETION. NO APPLICATION FEE IS REQUIRED.

TUITION GRANTS ELIGIBILITY

This program is administered by the S.C. Tuition Grants Commission and is made possible through an annual appropriation by the South Carolina Gener Assembly. All awards made by the S.C. Tuition Grants Commission are contingent upon sufficient funding of the program by the State Legislature. The progran is designed to help eligible South Carolina residents offset the cost of attending an independent college in the state just as the state offsets the cost to a students attending a public institution. All grants are for the undergraduate level. Students must be enrolled full time and may elect to attend any of the followin institutions:

Anderson College — Anderson, S.C. 29621
Baptist College — Charleston, S.C. 29411
Benedict College — Columbia, S.C. 29204
Central Wesleyan College — Central, S.C. 29630
Claflin College — Orangeburg, S.C. 29115
Coker College — Hartsville, S.C. 29550
Columbia College — Columbia, S.C. 29203
Columbia Bible College — Columbia, S.C. 29230
(Education Majors Only)
Converse College — Spartanburg, S.C. 29301
Erskine College — Due West, S.C. 29639
Furman University — Greenville, S.C. 29613
Limestone College — Gaffney, S.C. 29340
Morris College — Sumter, S.C. 29150
Newberry College —Newberry, S.C. 29108
North Greenville College — Tigerville, S.C. 29688
Presbyterian College — Clinton, S.C. 29325
Spartanburg Methodist College — Spartanburg, S.C. 29301
Voorhees College — Denmark, S.C. 29042
Wofford College — Spartanburg, S.C. 29301

BASIS FOR SELECTION

Tuition Grants are awarded on the basis of financial need and academic merit. Need must be established first and will be determined by the S.C. Tuition Grants Commission. Ordinarily, freshman applicants must rank in the upper three-fourths of their high school class to be academically eligible for tuition grant assistance. Freshman applicants who rank in the bottom one-fourth may still qualify academically by scoring 800 or higher on the Scholastic Aptitude Test (SAT). Any award made will be contingent on meeting this requirement. Information provided on this application is strictly confidential. Information found to be incorrect or fraudulent will result in immediate cancellation of scheduled tuition grant award.

WHEN TO APPLY

All students are encouraged to complete the Tuition Grant Application as soon as possible after January 1. Eligible applicants will be considered for funding based on the date their complete application is received by the Commission as long as funds are available. Therefore, it is to your advantage to apply as early as possible. COPIES OF THE APPROPRIATE 1989 STATE AND FEDERAL TAX FORMS MUST ACCOMPANY THE APPLICATION.

AMOUNT OF GRANTS

The Tuition Grant is awarded for one academic year at a time, and a student may receive up to, but not exceeding, four (4) years of grant assistance. The applicant must reapply each year. The dollar amounts will vary according to need, cost of the college selected, number of dependents, number of dependents in college, the amount of available funds, etc. All awards are contingent upon legislative funding and may possibly be reduced if sufficient funds are not appropriated for the Tuition Grants program. The Tuition Grant is awarded to eligible students enrolled full time during the regular academic year. Tuition Grants may not be used for summer school. Grants are made for the whole year and may not be reserved for students entering second semester. If a student withdraws from school after receiving a Tuition Grant, an appropriate refund must be made to the Tuition Grants Commission by the college.

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FOR OFFICE USE ONLY

______	FAF Reg.______	REC______	CC______	CC______
______	IC______	CI______	FC______	FC______
______	PGI______	TA______	N______	N______
______	OA______		PG______	PG______
______	Approved______		A______	A______
______	Denied______			

GRAY BLOCK FOR OFFICE USE ONLY

READ ALL INSTRUCTIONS CAREFULLY BEFORE COMPLETING THIS FORM

A. APPLICANT INFORMATION

1. ______ Student's Last Name ______ First Name ☐ Middle Initial

4. ___ – __ – ____ Student's Social Security Number (Required for Processing)

2. ______ Number and Street of Student's Permanent Mailing Address

5. Sex.... ☐ Male ☐ Female

6. Date of Birth ______ MO. DAY YEAR

3. ______ City ____ State ______ Zip Code

7. ______ County of Residence

8. RACE (for statistical purposes only)........................ ☐Black ☐Caucasian ☐Other

9. MARITAL STATUS OF STUDENT.... ☐ Single ☐ Married ☐ Divorced, Separated, Widowed

10. Are you a legal resident of the United States?............................ ☐Yes ☐No

11. Will you have been a legal resident of South Carolina for twelve consecutive months by September 1, 1990?.. ☐Yes ☐No

12. Are you an active military family?.. ☐Yes ☐No
If yes, will you have been stationed in South Carolina for twelve consecutive months by September 1, 1990?.. ☐Yes ☐No
If yes, please refer to #14 on back page.

13. Name of South Carolina independent college you plan to attend in 1990-91 ______
I will attend (check one): Regular Semester Program ______
Non-Traditional Program (i.e. Modular, Adult Evening Program, etc.) ______

14. Student's college classification for the 1990-91 school year
(Check one box):.................. 1. ☐Freshman 2. ☐Sophomore 3. ☐Junior 4. ☐Senior

15. Have you previously attended a college or technical school?................. ☐Yes ☐No
If yes, name of institution last attended. ______

16. Your residency status during school year 1990-91
☐In Dormitory ☐Other Campus Housing ☐Maintain own Residence or With Parent

17. If you have previously received a S.C. Tuition Grant, please indicate the first year you received an award. ______

B. HIGH SCHOOL INFORMATION FOR FRESHMAN APPLICANTS ONLY

This High School information section below must be completed by the appropriate high school official for those students who have not attended a college, university or TEC school full time prior to the 1990-91 school year. If you are 22 years old or older, by September 1, 1990 check here ☐and disregard Section B.

Information in Section B must be provided by a high school official (or under certain circumstances, by a college official who has access to high school transcripts). Applications will not be processed until all sections are complete.

Inquiries may be made to:

S.C. TUITION GRANTS
COMMISSION
411 Keenan Building
P.O. Box 12159
Columbia, S.C. 29211
Phone: 734-1200

18. Applicant's Name ______

College Listed in Question 13 ______

19. The applicant's exact rank in his/her high school class is # ___ of ___ students through _____ semester, 19 ___.

GED Certificate .... ☐
Adult Education .... ☐
SAT or ACT Score (optional) _____
(Please attach verification of score)

20. VERIFICATION

By ______
Signature of High School Official

Name of School ______
City ______ State ______
Date ______

Official Seal or Stamp

C. STUDENT STATUS AND FINANCIAL INFORMATION

21. a. Was the student born before January 1, 1967 Yes☐ No☐
b. Is the student a veteran of the U.S. Armed Forces? Yes☐ No☐
c. Is the student an orphan or ward of the court? Yes☐ No☐
d. Does the student have legal dependents other than a spouse? Yes☐ No☐

Before going on, read and follow the instructions at the right.

- If you answered "Yes" to 21a, 21b, 21c, or 21d, you are an "Independent Student" and should complete the GRAY and WHITE sections only with Students information.
- If you answered "No" to all of 21a, 21b, 21c, and 21d and you are:
  —unmarried, answer 22 and 23 and follow instructions.
  —Married, answer 24 and follow instructions.

Unmarried Students

22. Was the student claimed by parents as a U.S. tax exemption.............. in 1988? Yes☐ No☐
in 1989? Yes☐ No☐

23. Was the student's total income and benefits less than $4,000.................................. in 1988? Yes☐ No☐
in 1989? Yes☐ No☐

If you answered "Yes" to any part of questions 22 or 23, you are a "Dependent Student" and your parents should complete the BLUE and WHITE sections below with their information.

If your answered "No" to all parts of questions 22 and 23, you are an "Independent Student" and should complete the GRAY and WHITE sections only, with student's information.

Married Students

24. Will the Student be claimed by parents as a U.S. income tax exemption in 1990? Yes☐ No☐

If you answered "Yes" to question 24, you are a "Dependent Student" and your parents should complete the BLUE and WHITE sections only with their information.

If you answered "No" to question 24, you are an "Independent Student" and should complete the GRAY and WHITE sections only with student's information.

PARENTS INFORMATION

25. Marital Status of Parents ☐Married ☐Divorced ☐Separated ☐Widowed ☐Single

27. Total Federal Adjusted Gross Income $__________.00
(As reported on Parent's 1989 Federal Tax Form)

a. Father's Earned Income..........$__________.00
(From 1989 W-2 Form)

b. Mother's Earned Income..........$__________.00
(From 1989 W-2 Form)

28. Non-Taxable Income..................$__________.00
(Social Security, V.A. Benefits and child support for all household members, tax-free bonds, welfare, non-taxable military pay, ministerial allowances, income earned out-of-state and not included in #27, all other income — Total for year.)

29. TOTAL INCOME..................$__________.00
(#27 plus #28.)

INDEPENDENT STUDENT'S INFORMATION

30. Total Federal Adjusted Gross Income $__________.00
(As reported on your 1989 Federal Tax Form)

a. Student's Earned Income..........$__________.00
(From 1989 W-2 Form)

b. Spouse's Earned Income..........$__________.00
(From 1989 W-2 Form)

31. Non-Taxable Income..................$__________.00
(Social Security, V.A. Benefits and child support for all household members, tax-free bonds, welfare, non-taxable military pay, ministerial allowances, income earned out-of-state and not included in #30, all other income — Total for year.)

32. TOTAL INCOME..................$__________.00
(#30 plus #31.)

26. Mother and Father/Parent and Stepparent
Mr. & Mrs. ☐
Mr. ☐ ____________________
Mrs. ☐
Home Address ____________________
City/State/Zip ____________________
Mother's Occupation ____________________
Father's Occupation ____________________

GRAY BLOCK FOR OFFI

33. Number of houshold members (1990-91) (head of household, spouse, and other dependents) .... ☐

34. Number of household members attending college at least half time (1990-91) .... ☐

ASSETS AND DEBTS

	A Present Value	B Unpaid Mort or Debts
HOME......................	$ ________	$ ________
OTHER REAL ESTATE.......	$ ________	$ ________
BUSINESS OR ESTATE (If partnership include only your portion of the value of the business/farm and your portion of the unpaid debt)..........	$ ________	$ ________
INVESTMENTS (stocks, bonds, etc.)..........	$ ________	
CASH , SAVINGS ACCOUNTS, CHECKING ACCOUNTS as of this date..................	$ ________	

35. NET ASSETS.................. $ __________.00
(Total Present Value of Assets (Column A) Minus Total Unpaid Debts (Column B)

COPIES OF YOUR OR YOUR PARENTS' 1989 STATE AND FEDERAL TAX FORMS MUST ACCOMPANY THIS APPLICATION.* IF NOT REQUIRED TO FILE, CHECK HERE. ☐

*If you completed the blue section, copies of your parents' 1989 State and Federal Tax Forms must be attached to this application; otherwise, attach copies of your tax forms. These copies should be identical to the forms that you submit to the tax office, complete with all signatures.

D. SIGNATURE AND PLEDGE

All persons providing information on this application must sign #36. I (We) hereby grant permission to have this application, tax records, high school records, and college financial and academic records examined by the Tuition Grants Commission and any college listed in #13. I (We) certify that the information contained in this application is correct. I (We) understand that any incorrect information or statements will disqualify this application. I (We) will notify the Tuition Grants Commission in writing of any change of address, college attendance, financial information, etc. If any award is made, the funds will be used only for payment of tuition and fees at an eligible college.

36. STUDENT ____________________

S
I
G
N

SPOUSE ____________________
FATHER ____________________
MOTHER ____________________
DATE COMPLETED ____________________
TELEPHONE NUMBER ____________________

BEST COPY AVAILABLE

CHECKLIST OF INSTRUCTIONS FOR S.C. TUITION GRANT APPLICATIONS.

__________ 1. Please type or print all answers in black or dark ink; do not use a pencil.

__________ 2. You must provide your Social Security Number in question #4. If you do not have a Social Security Number, use the num of one of your parents. Apply for a Social Security Number immediately, and contact the SCTG Commission whe receive your number.

__________ 3. Enter amounts in dollars, omit cents. For example, if the income is $8,425.59 enter $8,425.

__________ 4. Do not leave items blank.

__________ 5. Complete each item to the best of your ability. Incomplete forms will not be accepted, but will be returned to the applicant for completion. Applications should not be submitted before January 1, 1990.

__________ 6. Attach copies of the 1989 State and Federal Tax Forms. These copies should be identical to the forms that you submit to the tax office, complete with all signatures. WAGE AND TAX STATEMENTS WILL NOT BE ACCEPTED. Do not mail this application without attaching copies of the specified tax forms, unless no tax returns will be filed for 1989. Copies o your tax forms cannot be returned.

__________ 7. ASSETS AND DEBTS: Please give the present retail market value of each property listed and the unpaid mortgage o debt for the property. Do not include the value or debt for cars, boats, or household items. Also, do not include educational or consumer indebtness.

__________ 8. All applicants are urged to apply for a Pell Grant. Write or call any college financial aid office or this commission t obtain an application.

__________ 9. Complete all admission requirements at the independent college you listed on this application (see question 13).

__________ 10. Circumstances that will substantially alter your family finances for the 1990-91 academic year may be outlined on an additional page attached to this application form.

__________ 11. If you are a freshman applicant, have your high school guidance counselor (or college official) complete Section B, Hig School Information, at the same time that you complete the rest of the application.

__________ 12. If you should change your college choice after you have submitted your Tuition Grant application, you must notify th Tuition Grants Office in writing immediately. You must also notify the colleges involved of this change.

__________ 13. For assurance that your application has been received, SEND IT BY OVERNIGHT LETTER OR EXPRESS MAIL, OR ST AND ENCLOSE THE REPLY CARD PROVIDED WITH APPLICATION. THE SCTG COMMISSION CANNOT BE RESPONS BLE FOR APPLICATIONS LOST IN THE MAIL.

__________ 14. For purposes of the S.C. Tuition Grants program, active military personnel stationed in South Carolina for a period one year prior to September 1 of the year entering college are eligible to apply for SCTG assistance. A copy of your 1989 Federal tax form must be submitted with the application. South Carolina residents stationed outside of the state are eligible to apply for SCTG assistance. Please attach a copy of the form verifying your home of record as South Carolina.

HOW TO APPLY FOR FINANCIAL ASSISTANCE

Knowing when and how to apply for financial aid may be very important to you as a prospective college student. You should start the financial aid processs by personally contacting the financial aid director at your college or your local high school counselor. The financial ai director or your high school counselor will be able to provide you with the forms necessary to apply for most financial aid programs. As yo complete the forms, you should keep a copy of the information for your own records. By maintaining a copy of all application forms you wi have a record of everything that has transpired for the current year, and this information will be helpful to you when you apply again in th future years. Apply for all sources of financial aid as soon as possible after January 1 of each year.

IN REVIEW

You must have a Social Security Number
Start early and be aware of program deadlines
Contact your financial aid director or high school counselor
Complete this South Carolina Tuition Grant Application
Apply for a Pell Grant
Keep copies of forms for your records
Check each item on checklist above
Send in by Overnight Letter or Express Mail

PARTICIPATING COLLEGES

COLLEGES	FINANCIAL AID DIRECTORS
ANDERSON COLLEGE *Anderson, S.C. 29621*	Jim Owens 226-6181
BAPTIST COLLEGE AT CHARLESTON *Charleston, S.C. 29411*	Ellen Green 797-4749
BENEDICT COLLEGE *Columbia, S.C. 29204*	Wayne Sumpter 256-4220
CENTRAL WESLEYAN COLLEGE *Central, S.C. 29630*	Debbie Hamilton 639-2453
CLAFLIN COLLEGE *Orangeburg, S.C. 29115*	Yvonne Clarkson 534-2710
COKER COLLEGE *Hartsville, S.C. 29550*	Hal Lewis 332-1381
COLUMBIA COLLEGE *Columbia, S.C. 29203*	Doris Harrell 786-3644
COLUMBIA BIBLE COLLEGE *Columbia, S.C. 29230*	Ken Ritchie 754-4100
CONVERSE COLLEGE *Spartanburg, S.C. 29301*	Peggy Collins 585-6421
ERSKINE COLLEGE *Due West, S.C. 29639*	Dot Carter 379-8832
FURMAN UNIVERSITY *Greenville, S.C. 29613*	John Burns 294-2204
LIMESTONE COLLEGE *Gaffney, S.C. 29340*	Virginia Hickey 489-7151
MORRIS COLLEGE *Sumter, S.C. 29150*	Sandra Gibson 775-9371
NEWBERRY COLLEGE *Newberry, S.C. 29108*	Sandra Gundlach 276-5010
NORTH GREENVILLE COLLEGE *Tigerville, S.C. 29688*	Anne Smith 895-1410
PRESBYTERIAN COLLEGE *Clinton, S.C. 29325*	Judi Gillespie 833-2820
SPARTANBURG METHODIST COLLEGE *Spartanburg, S.C. 29301*	Wynell Greer 587-4000
VOORHEES COLLEGE *Denmark, S.C. 29402*	Lavenia Freeman 793-3351
WOFFORD COLLEGE *Spartanburg, S.C. 29301*	Donna Hawkins 585-4821

S.C. TUITION GRANTS COMMISSION
411 Keenan Building
P.O. Box 12159
Columbia, South Carolina 29211
734-1200

S.C. Tuition Grants Commission
411 Keenan Building
P.O. Box 12159
Columbia, South Carolina 29211
Telephone: 734-1200

1990-1991 SOUTH CAROLINA HIGHER EDUCATION TUITION GRANTS PROGRAM

Administered by the
S.C. Higher Education Tuition Grants Commission
Edward M. Shannon, Executive Director

1. ***What is the S.C. Tuition Grants Program?***

The Tuition Grants Program is administered by the S.C. Tuition Grants Commission and is made possible through an annual appropriation by the S.C. General Assembly. The purpose of the program is to provide undergraduate grant assistance to eligible South Carolina residents attending on a full-time basis certain independent non-profit colleges located in the state. (See back of brochure for participating colleges).

2. ***Why a Tuition Grants Program for independent colleges?***

Just as the State offsets the cost of all students who attend S.C. public colleges, the Legislature felt that it would be equitable to assist those eligible students who prefer to attend a S.C. independent college.

3 ***How much can I receive and how is the award determined?***

Although not all students qualify for tuition grant assistance, awards during 1989-90 averaged about $2,560. The size of your grant will depend on your family resources, your academic merit, the cost of the institution selected, and final funding of the Tuition Grants Program by the State Legislature.

4. ***How is academic merit determined?***

The Commission feels that on the freshman level, graduation in the upper 3/4 of your high school class or scoring 800 or above on the Scholastic Aptitude Test (SAT) or its equivalent on the ACT constitutes academic merit. For upperclassmen, merit is the satisfactory completion of a minimum of 24 semester hours each year.

5. ***What Financial factors are considered?***

The Commission considers (1) family income, (2) fam[illegible]ssets, (3) cost of the college selected, (4) nu[illegible] houshold members, and (5) number of household members in college simultaneously, etc.

6. ***Is this a "poverty program"?***

No. The intent of the Legislature is to make grants to low and middle income families who, without assistance, might not be able to send their children to an independent college in South Carolina.

7. ***May I use this grant at an out-of-state college?***

No.

8. ***What are some other limitations on the grant?***

No tuition grant may be applied toward room and board charges, summer school or graduate school work.

9. ***If I receive a grant as a freshman, would I get to keep it for subsequent years?***

Although the grants are made possible by annual state appropriation, as long as the student makes satisfactory progress towards graduation, applies "on time", and meets all other eligibility requirements, he is eligible to renew his grant provided funds are available and his financial situation is not altered. A student may receive up to, but not exceeding, four (4) years of tuition grants. Each recipient must reapply annually.

10. ***What if I receive other scholarships or grants?***

No tuition grant will be made that exceeds a student's need. Therefore, the Commission must consider all awards which a student receives and adjustments to the tuition grant may be made in certain situations. Students applying for a tuition grant are encouraged to apply for a Pell Grant Award.

11. ***What if I transfer to another college?***

The grant may be transferred with the recipi to a participating college, but an adjustm upward or downward may be made depend on the cost of the new institution.

12. ***Do I have to repay the grant?***

No. However, if you drop out of school, unused portion of the grant must be refun to the state.

13. ***When will the Awardee be notified?***

Awardees are notified as soon as possible a completing all forms. A State of So Carolina check will be issued to recipients a registration and must be deposited at the lege selected.

14. ***When should I apply?***

Applications should be submitted after Janu 1 of the year you plan to attend. Apply as ly as possible. A 1989 S.C. State Tax form a 1989 Federal Tax form must be submi with the Tuition Grant Application.

15. ***Where can I apply for a grant?***

Tuition Grant Applications are available a high school guidance offices, at participa colleges, and at the South Carolina Tuit Grants Commission.

16. ***If I have other questions about the Tuit Grants Program, who may I contact?***

Further questions should be addressed to Financial Aid Director at any eligible coll or to the Tuition Grants Commission.

STUDENT FINANCIAL ASSISTANCE SERVICE $ Provided by the Greenwood Trust Company, Issuer of the Discover℠ Card

PRESENTS . . .

AN EASY LESSON IN STUDENT FINANCES:

LOWERING THE COST OF FINANCING HIGHER EDUCATION

© Copyright 1987

The Student Financial Assistance Service Can Help You Get the Scholarship, Grant, Work-Study or Loan You Need.

Lesson #1

There are more than $12 billion in student aid available for the 1988-89 school year. Unfortunately, the financial aid process can be tedious and complicated. But you don't have to worry anymore. The Student Financial Assistance Service understands this process and is ready to help you find out if you qualify for available scholarships, grants, work-study and loans.

Lesson #2

You can find out if you're eligible for our Guaranteed Student Loan (GSL) Program offering up to $2,625 a year for first or second year undergraduate students, $4,000 a year for students who have completed two full years and $7,500 a year for graduate students. Our GSL is an 8% loan made to you by Greenwood Trust Company, the institution behind the Student Financial Assistance Service. You make no payments until six months after you leave school.

Lesson #3

The Student Financial Assistance Service is ready to help. Because we're a part of Greenwood Trust Company, issuer of the Discover℠ Card, you can count on us for efficient, expert assistance. All services are provided free of charge and without obligation. Your eligibility is not based on test scores and funds are available for many types of education beyond high school.

NOTE: Financial aid eligibility rules are constantly changing. That's why we urge all students to take advantage of our free services.

STUDENT FINANCIAL ASSISTANCE SERVICE...

Helping Students Lower the Cost of Financing Higher Education

Here's How the Student Financial Assistance Service, provided by Greenwood Trust Company, Issuer of the Discover℠ Card, Can Help You

STEP 1:
Get Your FREE Student Guide

You can request a FREE copy of the Student Guide, published by the U.S. Department of Education. It's a handy, information-packed booklet outlining the available student aid programs, eligibility requirements and instructions for applying. Just check off the appropriate box on the Request Form at right to receive your Student Guide – at no cost or obligation.

STEP 2:
Complete and Return the Attached Request Form

Fill out the general information requested on the Request Form at right. Then, talk to your counselor or contact the college or school you plan to attend. Find out what financial aid application is preferred. If you need an "Application for Federal and State Student Aid" (AFSSA), we can send it to you free, at your request. There is no charge for processing this form. Just check off the appropriate box at right.

If you don't know what application your school prefers, or if they prefer a form other than the AFSSA, check the appropriate box and we'll send a letter to the school for you, asking them to send you the necessary forms.

Be sure to sign your name below the Student Permission statement. This will allow us to inform your school that if you are not eligible for sufficient grants and scholarships to meet your financial needs, and if you are eligible for a Guaranteed Student Loan, Greenwood Trust Company can be your lender.

Return your completed Request Form today. The postage has been pre-paid for you.

STEP 3:
Review the "Student Aid Report"

After you submit your application form, you will receive a FREE "Student Aid Report" (SAR). This report provides the official government figures indicating whether you are eligible for up to $2,100 for a federal Pell Grant. Depending on the school, your SAR may also be used to determine if you are eligible for other student financial aid programs including a Guaranteed Student Loan.

Learn About Our Guaranteed Student Loan Program . . .

If you are not eligible for sufficient grants and scholarships to meet your needs, you may find you are eligible for our Guaranteed Student Loan (GSL) Program.

Our GSL is an 8% loan made to you by Greenwood Trust Company, the institution behind the Student Financial Assistance Service and Discover℠ Card. It offers the following benefits:

- Up to $2,625 a year for first or second year undergraduate students,
- $4,000 a year for students who have completed two full years, and
- $7,500 a year for graduate students.
- You make no payments until six months after you leave school.

This Guaranteed Student Loan Program is just one more way the Student Financial Assistance Service is ready to help you get the money you need to lower the cost of financing higher education.

The Student Financial Assistance Service, provided by Greenwood Trust Company, Issuer of the Discover℠ Card . . .
Advice from a Name You Can Trust

The process of seeking out and applying for student financial aid can be complex and confusing. That's why today, we're offering you the unique opportunity to work with the Student Financial Assistance Service (SFAS).

The Student Financial Assistance Service has been created specifically to help you discover the various financial aid options available to you. We understand the finer points of the application process and can help you get the financial assistance you need.

All services are offered to you free of charge and with no obligation. You can count on us to give you the sound, expert advice you deserve and expect.

ete and Return the Request Form at Right for Your FR[illegible] udent Guide. →

CFA47SHLV

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UNITED STATES

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STUDENT FINANCIAL
ASSISTANCE SERVICE

% ISSC Processing Center
P.O. Box 1980
Jacksonville, FL 32201-9960

"Success breeds success; high expectations promote high achievement. I want my students to believe in themselves, to be able to cope with life's problems and find solutions to those problems by making good choices."

Angela Brown Burkhalter
1988 South Carolina
Teacher of the Year

Education

IS A GOOD INVESTMENT

The Paul Douglas Teacher Scholarship Program

South Carolina

STUDENT LOAN
CORPORATION

THE PAUL DOUGLAS TEACHER SCHOLARSHIP PROGRAM

Established by Congress in 1985 to provide college scholarships for outstanding high school graduates to encourage and enable them to pursue teaching careers at the preschool, elementary, or secondary level.

WHO IS ELIGIBLE?

To be eligible to receive a Paul Douglas Teacher Scholarship you must:

- Be a United States citizen, and
- A resident of South Carolina or a non-resident attending a South Carolina institution, and
- Accepted for enrollment or enrolled in an eligible institution which offers a program of instruction leading to certification as a teacher at the pre-school, elementary, or secondary level, and
- Have ranked in the top 10% of your high school graduating class, and
- If in college, have an academic average both cumulatively and in the major subject area of at least 2.75 on a 4.0 scale or its equivalent, and
- Be committed to teaching.

HOW ARE SCHOLARSHIP RECIPIENTS CHOSEN?

Scholarship recipient selection will be made on the basis of academic performance, evidence of leadership, extracurricular participation, and the promise of service as a teacher at the preschool, elementary or secondary level by a seven member Selection Committee appointed by the Governor.

HOW MUCH CAN I RECEIVE?

Scholarship recipients may receive awards up to $5,000 annually for a maximum of four academic years. The Award may not exceed the cost of education and may be reduced if other financial aid is received.

WHAT HAPPENS IF I DO NOT TEACH?

Scholarship recipients are generally required to teach for two years for each year of scholarship assistance they receive. If you teach in a school with a high concentration of economically disadvantaged students you are obligated to teach one year for each year of scholarship assistance. If you do not teach the scholarship converts to a loan and you are required to repay on a prorata basis the total amount of the scholarship as well as accrued interest at a rate set by Congress. Only students who are absolutely committed to teaching should apply.

HOW DO I APPLY?

Application forms are available from the S.C. Student Loan Corporation, Deans of Schools of Education, and Financial Aid Offices of colleges within South Carolina. Applicants must follow the instructions carefully. Deadline for receipt of applications is April 15.

The South Carolina Student Loan Corporation has been designated as the administrative agency for the Paul

UNIT VIII--ENTREPRENEURSHIP

ENTREPRENEUR SURVEY
INTERVIEW SHEET

This questionnaire will give each student an opportunity to interview an individual who owns his/her own business. The individual selected for the interview should be someone who owns a business that is of interest to the student.

Some of the information, such as growth for the occupation on a state and national level and opportunities for advanced training will have to be researched by the student.

Name of Business ______________________________

Type of Business ______________________________

What type of growth is expected in this business on the

State Level? ______________________________

National Level? ______________________________

Source(s) of Possible Training

____

____

What does the owner feel are the advantages of owning his/her own business?

What does the owner feel are the disadvantages of owning his/her own business?

LEGAL CONSIDERATIONS

What type(s) of permits/licenses are required before the business can operate?

Where can these be purchased? What are the associated costs?

What type(s) of health and environmental regulations are mandated?

Are there any federal/state/local regulations governing this type of business? If so, what are they?

FUNDING

How was funding for this business secured?

Was any type of collateral required? If so, what was the collateral?

What type of start-up inventory was required?

What other financial hurdles had to be overcome?

EMPLOYEES AND BENEFITS

What are the guidelines for hiring employees? Is there a written policy? If so, ask for a copy.

What types of benefits are provided? Health/life insurance? paid vacations? overtime? retirement plans? advancement opportunities?

How often are the employees paid?

TRAINING

How did the owner receive training to operate this business?

What type of postsecondary training would have benefited the owner?

If the owner did not receive any formal, postsecondary educational training, would a two-year degree in business have benefited the owner?

What types of managerial skills are needed? Does the owner need knowledge of record keeping? finances? personnel management? federal, state, and local tax laws? labor laws?

ESTIMATED EXPENSES

Budgeting is a tool for dealing with the future. It helps turn expectations into realities. A budget is a plan that enables a manager/owner to set a goal and list the necessary steps to reach that goal.

This activity will allow students to gain information about the monthly expenses required in running a small business. If student can, this information should be secured from the same individual interviewed about a small business. The amounts do not have to be exact; they can be estimates for each of the items listed. Once the student has completed this sheet, he/she should present a brief summary of their findings to the class.

EXPENSE	ESTIMATED MONTHLY COST
Salary--owner/manager	
Other salaries and wages	
Other salary-related costs	
Social Security	
Insurance	
Workman's Compensation	
Other (Specify)	
Rent	
Utilities	
Electricity	
Water	
Telephone	
Gas	
Legal/Professional Fees	
Maintenance	
Inventory	
Supplies	
Advertising	
Interest on Loan	
Other expenses (Specify)	

"Small Business Is Big Business"

Fact Sheet for Starting a Small Business

Clemson University Regional
Small Business Development Center

Third Edition
Revised Spring 1990

BEST COPY AVAILABLE

FACT SHEET FOR STARTING A SMALL BUSINESS

Approximately 95% of the businesses in South Carolina are categorized as small businesses. It is important for the small business to have a source of assistance should he/she encounter a problem and need help. This service is provided at no charge by the Small Business Development Center of South Carolina. The SBDC tries to address any problems encountered and offer professional assistance in areas such as finance, accounting, marketing and management for existing businesses. If you are just starting a business, the SBDC will help you develop your business plan and offer guidance in obtaining capital.

There are certain requirements you must meet before going into business. This booklet is intended to be a quick guide to sources of information about regulations that affect you and your business. Although this outline is not complete, it should prove helpful in your venture. Perhaps the best source of information are your local authorities. Always be sure to get the name of the party you deal with so that you can call back for additional information.

This booklet has been provided by:

SMALL BUSINESS DEVELOPMENT CENTER of CLEMSON
Clemson University Regional Office
425 Sirrine Hall
Clemson University
Clemson, SC 29634-1301
(803) 656-3227

AREA CENTERS

Spartanburg SBDC
P.O. Box 1636
Nations Plaza Headquarters
Spartanburg, SC 29304
(803) 594-5080

Greenville SBDC
Box 5616, Station B
GHEC
Greenville, SC 29606
(803) 271-4259

Lander SBDC
P.O. Box 6143
Greenwood, SC 29646
(803) 227-6110

BUILDING LICENSES, BUILDING INSPECTION, AND ZONING

Businesses located in a county (outside the city limits) are not required to have a business license. However, they may be required to have Certificate of Occupancy issued by the Permit Office of their County. This certificate enables the county government to enforce zoning requirements and make sure your building meets all the county codes. The cost for a permit to build a new building is based on construction cost.

Businesses located or doing business within the city limits must make an application for Certificate of Occupancy at your city hall. This enables the city government to enforce zoning and code requirements. Once the certificate is issued, you may purchase a business license. The cost for the business licence is based on your projected sales.

County Regulations:

For regulations concerning Certificates of Occupancy, building permits, and zoning, contact your county courthouse Building Permits Division. (Look under County Government in the yellow pages of your telephone directory.) Below is a partial list of major courthouses in our eleven county area.

ABBEVILLE COUNTY -
Administrator
Abbeville Courthouse
Abbeville, SC 29620
(803) 459-5312

ANDERSON COUNTY -
Assessor
P.O. Box 4046
Anderson, SC 29622
(803) 260-4028

EDGEFIELD COUNTY -
Administrator
P.O. Box 663
Edgefield, SC 29824
(803) 637-5781

GREENVILLE COUNTY -
Building Permits
Room 113 Courthouse Annex
Greenville, SC 29601
(803) 240-7060

GREENWOOD COUNTY -
Building Permits
Room 107 Courthouse
Greenwood, SC 29646
(803) 229-6622 Ext. 257

LAURENS COUNTY -
Administrator
P.O. Box 445
Laurens, SC 29360
(803) 984-5484

MCCORMICK COUNTY -
Administrator
Rt. 2 Box 84AAA
McCormick, SC 29835
(803) 465-2231

OCONEE COUNTY -
Administrator
County Mail Room
Walhalla, SC 29691
(803) 638-2532

PICKENS COUNTY -
Administrator
P.O. Box 275
Pickens, SC 29671
(803) 787-7800

SALUDA COUNTY -
Administrator
101 S. Main St.
Saluda, SC 29138
(803) 445-2635

SPARTANBURG COUNTY -
Assessor
366 N. Church St.
Spartanburg, SC 29303
(803) 596-2526

City Regulations:

For regulations concerning Certificates of Occupancy, building permits, business licenses and zoning, contact your local city hall and ask for the appropriate division. (Look under City Government in the yellow pages of your telephone directory.) Below is a partial list of major cities in our eleven county area.

ABBEVILLE - Opera House, Court Square, P.O. Box 40, Abbeville, SC 29620 (803) 459-5017

ANDERSON - 401 S. Main St. Anderson, SC 29624 (803) 231-2213

BELTON - 306 Anderson St. P.O. Box 828 Belton, SC 29627 (803) 338-7773

CALHOUN FALLS - 300 Washington St. P.O. Box 246 Calhoun Falls, SC 29628 (803) 447-8512

CAMPOBELLO - P.O. Box 8 Campobello, SC 29322 (803) 468-4545

CENTRAL - 101 Werner St., P.O. Box 248
Central, SC 29630 (803) 639-6381

CENTRAL PACOLET - Box 335
Central Pacolet, SC 29372 (803) 474-2785

CITY VIEW - 1105 Woodside Ave.
City View, SC 29611 (803) 232-8374

CLEMSON - P.O. Box 1566
Clemson, SC 29633 (803) 653-2030

CLINTON - 404 North Broad St. P.O. Drawer 748
Clinton, SC (803) 833-7505

COWPENS - P.O. Box 236
Cowpens, SC 29330 (803) 463-3201

CROSS HILL - Main St. P.O. Box 337
Cross Hill, SC 29332 (803) 998-3276

DONALDS - P.O. Box 176
Donalds, SC 29638 (803) 459-5017

DUE WEST - 103 Min St., P.O. Box 278
Due West, SC 29639 (803) 379-2385

DUNCAN - 155 Main St. P.O. Drawer 188
Duncan, SC 29334 (803) 439-2664

EASLEY - 205 N. 1st St. P.O. Box 466
Easley, SC 29641 (803) 855-7900

EDGEFIELD - 402 Main St.
Edgefield, SC 29824 (803) 637-3935

FOUNTAIN INN - 200 North Main St.
Fountain Inn, SC 29644 (803) 862-4421

GAFFNEY - 203 N. Limestone St., P.O. Box 278
Gaffney, SC 29342 (803) 487-8505

GRAY COURT - 48 S. Main St., P.O. Box 438
Gray Court, SC 29645 (803) 876-2581

GREENVILLE - 206 S. Main St., P.O. Box 2448
Greenville, SC 29602 (803) 240-4505

GREENWOOD - 520 Monument St., P.O. Box 40
Greenwood, SC 29648 (803) 229-0211

GREER - 106 S. Main St.
Greer, SC 29650 (803) 877-9061

HODGES - Main St.
Hodges, SC 29653 (803) 374-3111

HONEA PATH - 30 North Main St.
Honea Path, SC 29654 (803) 369-2466

IVA - Jackson St., P.O. Box 188
Iva, SC 29655 (803) 348-6193

JONESVILLE - Pacolet St., P.O. Box 785
Jonesville, SC 29353 (803) 674-5746

LANDRUM - 100 N. Shamrock Ave.
Landrum, SC 29356 (803) 457-3712

LAURENS - P.O. Box 519
Laurens, SC 29360 (803) 984-3933

LIBERTY - 206 W. Front St. P.O. Box 716
Liberty, SC 29657 (803) 843-6011

LOWNDESVILLE - P.O. Box A
Lowndesville, SC 29659 (803) 459-5017

LYMAN - 59 Groce Rd.
Lyman, SC 29365 (803) 439-3453

MAULDIN - 5 E. Butler Ave., P.O. Box 249
Mauldin, SC 29662 (803) 288-4910

MCCORMICK - P.O. Box 306
McCormick, SC 29835 (803) 465-2225

NORRIS - P.O. Drawer N
Norris, SC 29667 (803) 639-2003

PACOLET - P.O. Box 700
Pacolet, SC 29372 (803) 474-9504

PARKSVILLE - P.O. Box 4806
Parksville, SC 29844 (803) 333-5584

PELZER - P.O. Box 427
Pelzer, SC 29669 (803) 947-6231

PENDLETON - 108 South Depot St.
Pendleton, SC 29670 (803) 646-3622

PICKENS - P.O. Box 217
Pickens, SC 29671 (803) 878-6421

PLUM BRANCH - P.O. Box 151
Plum Branch, SC 29845 (803) 443-5327

SALEM - P.O. Box 30
Salem, SC 29676 (803) 944-0912

SALUDA - 115 W. Church St., P.O. Box 675
Saluda, SC 29138 (803) 445-3522

SENECA - P.O. Box 4773
Seneca, SC 29679 (803) 885-2700

SIMPSONVILLE - 405 E. Curtis ST., P.O. Box 668
Simpsonville, SC 29681 (803) 963-3461

SIX MILE - P.O. Box 429
Six Mile, SC 29682 (803) 868-2653

SPARTANBURG - 145 Broad St. P.O. Box 1749
Spartanburg, SC 29304 (803) 596-2000

TRAVELERS REST- 160 State Park Rd.
Travelers Rest, SC 29690 (803) 834-7958

TRENTON - P.O. Box 36
Trenton, SC 29847 (803) 275-2538

WALHALLA - 101 E. Main St., P.O. Box AP
Walhalla, SC 29691 (803) 638-4343

WARE SHOALS - P.O. Box 510
Ware Shoals, SC 29692 (803) 456-7478

WELLFORD - P.O. Box 99
Wellford, SC 29385 (803) 439-4875

WEST PELZER - 3 Hindman Street
West Pelzer, SC 29669 (803) 947-6297

WEST UNION - P.O. Box 129
West Union, SC 29696 (803) 638-9978

WESTMINSTER - P.O. Box 399
Westminster, SC 29693 (803) 647-5071

WILLIAMSTON - 12 W. Main St., P.O. Box 70
Williamston, SC 29697 (803) 847-7473

TAXES

Employer-Employee Taxes

You are required to withhold from the wages paid to your employees:

1. Federal Income Tax
2. State Income Tax
3. F.I.C.A. (Social Security Tax)

Your local Internal Revenue Service offers the Small Business Tax Kit, which is available upon request. This kit is a must for all businesses and contains valuable forms and information on several subjects such as:

1. Obtaining an Employer ID Number
2. Free publications useful to industry and business
3. Tax due dates

The Internal Revenue Service offers a Small Business Tax Workshop to assist businesses with the preparation of their taxes. This workshop is held the third Thursday of every month. The SBDC suggests that all new businesses attend this workshop. The seminar is filled on a first come first serve basis.

For additional information on the workshop and federal taxes, contact:

WORKSHOP

Internal Revenue Service
NCNB Plaza Suite M 14
7 North Laurens Street
Greenville, SC 29601

INFORMATION

Internal Revenue Service
1-800-424-1040

State Taxes

There are several categories of taxes with which may apply to your firm. Check regulations regarding your firm and see if any are applicable to your firm.

1. INCOME TAX WITHHOLDING

South Carolina Tax Commission
P.O. Box 125
Columbia, SC 29214
(803) 737-5000

2. SALES AND USE TAX

South Carolina Tax Commission
Sales and License Division
P.O. Box 125
Columbia, SC 29214
(803) 737-4660

3. UNEMPLOYMENT COMPENSATION CONTRIBUTIONS

South Carolina Employment Security Commission
701 Hampton, St.
Columbia, SC 29202
(803) 737-9935

4. WORKERS COMPENSATION

South Carolina Worker's Compensation Commission
P.O. Box 1715
Columbia, SC 29202
(803) 737-5700

5. ADMISSIONS TAX

Sales and License Division
P.O. Box 125
Columbia, SC 29214
(803) 737-4660

6. ALCOHOLIC LIQUORS TAX

Alcohol Beverage Control Commission
1205 Pendleton Street
Columbia, SC 29201
(803) 734-0470

FEDERAL AND STATE UNEMPLOYMENT INSURANCE

The total of federal and state unemployment tax payable by the employer is 6.2% on the first $7,000.00 earned by a worker in the calendar year: 5.6% of the first $7,000.00 goes to the state and the remaining .8% goes to the federal government for administration of the program.

Employers are usually required to pay federal and state unemployment insurance if they meet certain liability requirements. You must file an initial Employer Status Report form so an official .determination can be made with respect to your business. You should obtain unemployment insurance tax forms, the Employer's Handbook and an identification number. Contact:

FEDERAL
Internal Revenue Service
1-800-241-3860

STATE
South Carolina Employment Security Commission
Attn: UI: Technical Services
P.O. Box 995
Columbia, SC 29202
(803) 737-3071

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

The Occupational Safety and Health Administration (OSHA) regulates your work place concerning the health and safety of your employees. To comply with the OSHA requirements you should obtain the regulations pertaining to your type of business.

Contact:

U.S. Department of Labor
1835 Assembly Street Room 1468
Columbia, SC 765-5904

South Carolina has an occupational safety and health law which is administered by the Commission of Labor.

Contact:

South Carolina Department of Labor
3600 Forest Drive
P.O. Box 11329
Columbia, SC 29211
(803) 734-9600

WORKMEN'S COMPENSATION INSURANCE

The South Carolina Workmen's Compensation Act presumes that all employers and their employees within the state of South Carolina come under its provisions unless specifically excluded by the statute. Even those employers and employees who are specifically excluded from the coverage of the act may voluntarily elect to come under the act's provisions by completing certain forms. Excluded from the Workmen's Compensation Act coverage are employments involving:

1. Railways and Railway express carriers
2. Causal Labor
3. State and County fair associates
4. Agricultural labor, including salesmen of agricultural products
5. Any employment that has less than four employees regularly in service
6. Any employment with an annual payroll of less than $3,000.00

Call your insurance agent for information about Workmen's Compensation Insurance coverage or contact:

South Carolina Industrial Commission
1612 Marion St.
P.O. Box 1715
Columbia, SC 29202
(803) 737-5700

MINIMUM WAGES, MAXIMUM HOURS AND DISCRIMINATION

Each business should obtain regulations regarding the Fair Labor Standards Act. Even if you are exempt from federal law, you still may be subject to state law.

Contact:

FEDERAL	U.S. Department of Labor Employment Standard Administration Wage and Hour Division 1835 Assembly Street, Room 1072 Columbia, SC 29201 (803) 765-5981
STATE	South Carolina Department of Labor Landmark Center 3600 Forest Drive P.O. Box 11329 Columbia, SC 29211 (803) 734-9600

INCORPORATIONS AND LIMITED PARTNERSHIPS

There are many advantages to incorporation. Detailed information on this subject can be found in the Small Business Tax Kit, available from the IRS. If you intend to incorporate or form a general or limited partnership, competent legal advice is necessary. The South Carolina Bar Association provides a toll free legal referral number that a client can call if he or she needs a lawyer. This service is designed to find out what type of legal help a client needs and will give the client the name of a lawyer with the necessary expertise. In addition the service guarantees a 30 minute session with a lawyer for a maximum fee of $15.00. Information about the requirements and forms for incorporation and limited partnerships can be obtained from:

The Secretary of State
Wade Hampton Office Building
P.O. Box 11350
Columbia, SC 29211
(803) 734-2161

REAL ESTATE

Real estate transactions may require special consideration. Seek legal advice before completing any transactions.

FINANCING SALES TO CUSTOMERS

Consumer credit sales are regulated by the South Carolina Consumer Protection Code, the Federal Truth-in-Lending Act, and other federal laws. If your business involves consumer credit, seek legal advice before any transaction.

PATENTS AND INVENTIONS

A patent is a grant to an inventor for the right to exclude others from making, using or selling an invention throughout the United States. Publications regarding patent laws, trademarks and inventions are available at the Federal Bookstore and the Department of Commerce. Patent attorneys and agents are listed in the yellow pages. For patent applications and information contact:

US Patent and Trademark Office
Washington, DC 20231
(703) 557-3158

COPYRIGHTS

A copyright is a grant given by the United State Government to authors, extending them exclusive rights to do or to authorize the reproduction, performance or display of a copyrighted work. For copyright information contact:

Copyright Office
Library of Congress
Washington, DC 21559
(202) 479-0700

TRADEMARK AND SERVICE MARK

A trademark is a distinctive emblem or motto which a manufacturer places on a product so it may be identified as a product of the manufacturer. Information and applications for trademarks or service marks can be obtained from:

FEDERAL	US Patent and Trademark Office Washington, DC 20231 (703) 557-3158

STATE - The Secretary of State
Wade Hampton Office Building
P.O. Box 11350
Columbia, SC 29211
(803) 734-2161

CREDIT BUREAUS

For credit reporting and collections services contact:

ABBEVILLE COUNTY - Credit Bureau of Abbeville
P.O. Box 32
Washington St.
Abbeville, SC 29620
(803) 459-9854

ANDERSON COUNTY - Credit Bureau of Anderson
213 E. Benson, St.
Anderson, SC 29621
(803) 226-7601

GREENVILLE COUNTY - CBI Collections
P.O. Box 1345
304 W. Wade Hampton Blvd.
Greer, SC 29652
(803) 879-7106

GREENWOOD COUNTY - same as Anderson County

LAURENS COUNTY - Credit Bureau of Clinton
P.O. Box 482
101 Hampton
Clinton, SC 29325
(803) 833-2260

OCONEE COUNTY - Credit Bureau of Oconee County
402 N. Fairplay St.
Seneca, SC 29678
(803) 882-2791

PICKENS COUNTY - Credit Bureau of Pickens and Easley
202 W. Main St.
Easley, SC 29640
(803) 859-7543

SALUDA COUNTY - Credit Bureau Reports
420 N. Main St.
Saluda, SC 29138
(803) 445-2124

SPARTANBURG COUNTY- Credit Bureau Reports
129 Knollwood Drive
Spartanburg, SC 29304
(803) 574-1030

U. S. Department of Commerce publishes valuable business information in the areas of exporting and census statistics. Your local public library usually maintains much of this information. If the information you need is not available locally, Contact:

U.S. Department of Commerce
International Trade Administration District Office
1835 Assembly Street Room 172
Columbia, SC 29211
(803) 765-5345

U.S. Government printing office offers for sale, a wide range of publications. An index of publications is listed on SBA Form 1158. Contact:

U.S. Government Printing Office
Division of Public Documents
Washington, DC 20402
(202) 783-3238

Chamber

THANK YOU FOR YOUR INTEREST IN PROGRAMS TO ASSIST SMALL BUSINESSES IN THE GREATER GREENVILLE AREA. ENCLOSED IS MATERIAL TO ASSIST YOU AS YOU DEVELOP YOUR PLANS. THE FOLLOWING LOCAL ORGANIZATIONS ARE ALSO AVAILABLE TO HELP YOU IN STARTING, IMPROVING OR EXPANDING YOUR SMALL OR MID-SIZE BUSINESS:

- CLEMSON SMALL BUSINESS DEVELOPMENT CENTER
  WALT CHANDLER, MANAGER - GREENVILLE SATELLITE OFFICE
  GREENVILLE TECHNICAL COLLEGE
  P.O. BOX 5616, STATION B
  GREENVILLE, SC 29606
  271-4259

- GREENVILLE/SPARTANBURG MINORITY BUSINESS DEVELOPMENT CENTER
  SKIP WRIGHT, MANAGER
  300 UNIVERSITY RIDGE
  GREENVILLE, SC 29602
  271-8753

- SERVICE CORPS OF RETIRED EXECUTIVES (SCORE)
  FEDERAL OFFICE BUILDING
  300 EAST WASHINGTON STREET - ROOM B-37
  GREENVILLE, SC 29601
  271-3638

PLEASE CALL THE CHAMBER'S SMALL BUSINESS SERVICES DEPARTMENT (242-1050 IF YOU NEED MORE INFORMATION ON SERVICES OFFERED BY THE CHAMBER OR ON OTHER RESOURCES AVAILABLE TO ASSIST SMALL AND MID-SIZE BUSINESSES.

P.O. Box 10048, 24 Cleveland St. • Greenville, South Carolina 29603
Phone: (803) 242-1050

Chamber

THE SMALL BUSINESS ADMINISTRATION LOAN/FINANCE DEPARTMENT IN COLUMBIA, SOUTH CAROLINA - Telephone No. 253-3111

P.O. Box 10048, 24 Cleveland St. • Greenville, South Carolina 29603
Phone: (803) 242-1050

Chamber

SOME POINTS TO CONSIDER BEFORE STARTING YOUR BUSINESS

This self-assessment is intended to assist you in considering the fundamental steps which should be taken in starting a business. It is not intended to cover every aspect of business ownership and should not replace the assistance and advice you will need from a lawyer, accountant, banker and other professional. You may also want to contact the following local business assistance organizations for help in developing your business plan:

Clemson Small Business Development Center, Greenville Satellite Office	271-4259
Greenville/Spartanburg Minority Business Development Center	271-8753
Service Corps of Retired Executives	271-3638

YOUR IDEA

1. What type of business are you interested in starting?

2. What market will your product or service serve?

3. Is there a need for your product/service in that market? How did you determine that need?

4. How is your product or service better or different from other products or services currently available?

BACKGROUND

1. Have you been in business for yourself before? If yes, please describe.

2. What experience, courses or special training do you have that will help you in your business?

3. What personal traits or interests do you have that will help you in your business?

SALES AND MARKETING

1. Who would buy your product/service and why?

2. How would you market and advertise your product/service? What is the anticipated cost for marketing and advertising?

3. How would you make your product/service so that it was a higher quality or better price than that of your competitor(s)?

4. How much of your product/service could you sell in the first year? Who would you sell it to? What price would you sell it for? What would be the total income you would plan to get in the first year?

PERSONNEL

1. How many people would you need to help you make your product/service? What special skills or abilities would they need to have?

2. Where would you find these people and what would you have to pay them? What fringe benefits would you give them to get them to work for you? What would these fringe benefits cost your business?

EQUIPMENT

1. What special equipment would be required to get started (machines, tools, etc.)? What would be the cost on acquiring this equipment?

2. What kind of office, warehouse and other space would you need? How much would you need to pay to acquire your space needs?

3. What would be the cost of utilities to operate the equipment, provide the heat, lighting, water, telephone and air conditioning for your business?

4. What kinds of office supplies (business cards, stationery, postage, etc.) would you need for the business? How much would they cost?

5. What office equipment (typewriter, telephone, desk, etc.) would you need? How much would they cost?

6. How much income would you have to receive from the business in order to operate it as a full-time job?

7. How would you pay your bills before your customers pay you?

START-UP COSTS

1. How much money would you need to buy the equipment for making your product or providing your service and operating your business before you could get started?

2. How much money do you have in savings or other sources that you can use to help start this business? If you don't have enough, where do you plan to obtain it?

3. Would any of your relatives or friends be willing to buy stock or loan you money to help you get started? How much?

STRUCTURE

1. How do you plan to organize the business? Will it be a sole proprietorship, partnership, or a corporation?

GOALS

1. What are your personal and business goals now, for three years from now, and for five years from now?

You do not need to return this completed assessment to the Chamber of Commerce. It is to be used by you as a guide as you develop your business plan. For information on programs that are available to help small businesses, call the Chamber's Small Business Services Department at 242-1050.

SUMMARY OF LOAN APPLICATION

APPLICANT'S NAME
APPLICANT'S ADDRESS

NAME OF BUSINESS
ADDRESS

TYPE OF BUSINESS

SIZE OF BUSINESS

OWNERSHIP

LOAN REQUEST

AMOUNT	$
TERMS	Five years with no prepayment penalty. First payment due four months after date of note.
INTEREST RATE	Floating rate of Prime plus two percent with a ceiling over the life of the loan of Prime plus three and one half percent. For planning purposes, 9.5% is used.
COLLATERAL	1. Security interest in all business assets as identified in the attached. 2. Personal guarantee of the owner including a second position note on the owner's home to augment the business collateral.
OTHER CONDITIONS	1. Borrower will assign life insurance in the amount of the loan and keep it in force during the term of the loan. 2. Borrower will maintain insurance on all assets with loss payable endorsement in the amount and type required by lender. 3. Borrower to provide annual financial statement to lender.
PURPOSE OF LOAN	1. To purchase inventory and assets listed on the Project Opening Day Balance Sheet attached. 2. Cash flow for the company for 6 months.

STATEMENT OF SOURCE AND USE OF FUNDS

SOURCE OF FUNDS

Loan Proceeds	$	
Owner Investment	$	
Total Source of Funds		$

USE OF FUNDS

To be paid to the seller:		
Inventory as of (date)	$	
Equipment and fixtures	$	
Goodwill	$	
To be used for operations: Start-up, working capital and reserve	$	
Total Use of Funds		$

STATEMENT OF COLLATERAL

INVENTORY $

EQUIPMENT AND FIXTURES $

OTHER EQUIPMENT $

EQUIPMENT OWNED BY VENDORS $

BUSINESS PLAN

NAME OF BUSINESS

State the legal name of the business.

OWNER-TO-BE

State the owner(s) name(s) and the form and percent of ownership.

INFORMATION ABOUT THE BUSINESS

Type of Business

State the general and specific nature of the business. State the type of business.
State the company's goals and objectives.
Describe the products and/or services. State who buys the product/service and who the final users will be (briefly).
Describe how the product/service is sold to customers.
Describe how and where buyers get the product/service.
Comment on the quality of product/service.
Estimate average price of product/service.

History

If new, say so. If existing, discuss age of business, prior owners, how acquired and length of time operated by this owner: image or reputation: number of employees: last year's sales volume and profit: any significant events that have affected the company's development.

Building Facility

Give addresses and description of area and buildings.
State if rented, leased or owned. If rented or leased, state from whom and under what conditions.
Describe type of access to building (major roads, freeways, walking, parking, etc.).
Is the location good for customer convenience?
State business hours.
State size of facilities.

Personnel

For the present and future state: number of employees, type of labor, sources of labor, timing of hiring.
Comment on the quality of the staff.

Economics/Accounting

Describe how this business makes money.
State how prices are or will be determined and by whom.
State what financial records will be kept and by whom.

Inventory

Describe what inventory, raw materials and/or supplies the business uses (initial and continuing).

List your suppliers - name, address, type and percent of supplies furnished, and length of time you have been buying from each, reliability and frequency of purchase.

How easy or difficult is it to get necessary supplies? If it is difficult, how will you deal with potential or actual shortages?

Are the prices of your supplies steady or fluctuating? If fluctuating, how do you deal with changing costs?

Legal

State form of business and status (in process or formed).

State licensing requirements (type and source) and status (applied, pending, or obtained).

State zoning requirements and status (verified, OK, rezoning).

State insurance requirements (type and source) and status.

Have building codes been complied with?

State any health code requirements.

Describe any other laws and regulations that affect the business.

Describe lease, if any.

Trademarks, patents, licenses, and copyrights should be checked for legality.

Future Plans

State the plans for the future.

MARKET ANALYSIS

Customers

What is the market? Who are the customers?

Why does this market need your product/service? Is your product a fad or continuing need? being phased out or created by new technology?

List the characteristics of your average customer. age, market area, income/sales, sex, lifestyle (family or single), working, etc.

What do customers like and dislike about your product or business?

Estimate the size of the market (in terms of number of customers).

Estimate how much the total market will spend on this or similar products in the next year.

Environment

Discuss any environmental factors (economic, legal, social or technological) that affect your market or product. Environmental factors are those that have significant affects on your operation, but over which you have no control (county growth, rising energy costs, etc.).

Competition

Discuss the competition: number of competitors (direct and indirect), type of company (product or service), location, age, reputation, size (sales and customers), market share.

Estimate how much of your product all the competition will provide in the next year.

List major competitors (names and addresses) and discuss their: product features, price, location/distribution, reputation/image, market share, size, age, product quality, and marketing strategy.

Competitive advantages and disadvantages

Discuss how your product meets market needs and how you compare with the competition in terms of product features, locations/distribution, price, etc.

Compare your estimates of the market's demand and the competitions's supply.

The relationship of supply and demand will affect your marketing and sales strategy (high demand with low supply usually means less competition and less advertising). Conversely, low demand and high supply indicates a very competitive situation and a need for extensive marketing.

Projections

Give your projections in terms of the number of customers or items sold or contracts obtains, etc.

MARKET STRATEGY

Sales Strategy

Present the marketing strategy including how to get the edge on the competition and get customers. This is the action plan for the business. The product will sell if one or more of the following is attractive: features, pricing (high, medium, or low), distribution system (limited, widespread, etc.) and promotion.

Promotion Strategy

Describe how you plan to promote the product. State how you will promote: advertising, direct mail, personal contracts, sponsoring events or other (word of mouth, trade associations).

If you plan to advertise, state what media you will use: radio, television, newspaper, magazines, telephone book, etc. State why you consider the media you have chosen to be the most effective.

State the content of your promotion or advertising: what your product is, why it is attractive, business location, business hours, business phone number, etc. When you are designing your advertising, remember you are selling to satisfy someone's need. (Refer back to the MARKET ANALYSIS on needs.)

Management

Why have you chosen this type of business? For key management personnel, include the following: resume, personal financial statements, tax returns for the last three years and personal family budget.

Describe prior experience that qualified management to run this type of business. State why you feel you can run this business. State how much time management will devote to running this business. Discuss local contacts who may assist you in your business.

FINANCIAL ANALYSIS

Sources and Uses

Describe the project to be financed.

State where the money to pay for the project will come from and show in detail how it will be used.

Statement--Historical and Projected

If business is an existing one, include business tax returns and financial statement for the last 3 year. Financial statements should include:

- balance sheet
- income statement
- accounts receivable and aging
- accounts payable and aging
- debt schedule
- reconciliation of net worth

For both existing and new businesses, project the following:

- financial statements for the next three years (monthly for first year, annual for second and third)
- operating (or income) statement with explanation (sales, expenses, profit)
- balance sheet
- reconciliation of net worth
- cash flow with explanation
- breakeven analysis

START-UP COSTS

Inventory	$
Store Fixtures	$
Equipment	$
Power Deposit	$
Water Deposit	$
Telephone Connection	$
State Retail License	$
City License	$
Attorney Fees	$
Insurance	$
Supplies	$
Advertising	$

TOTAL	$

OPENING DAY BALANCE SHEET

ASSETS		
Cash		$
Inventory		$
Equipment and Fixtures:		
Equipment	$	
Fixtures	$	
Less depreciation	$	
Net Equipment and Fixtures		$
Other Assets		$
TOTAL ASSETS		$
LIABILITIES AND OWNER EQUITY		
Notes Payable	$	
Accounts Payable	$	
Income Tax Payable Current	$	
Accrued and Other Liabilities	$	
TOTAL LIABILITIES		$
Owner Equity		$
TOTAL LIABILITIES AND OWNER EQUITY		$

OWNER'S SELF ASSESSMENT

A. Personal Strengths

B. Personal Weaknesses

C. Steps to Correct Weaknesses
D. Commitment

UNIT IX--STUDY SKILLS

ARE YOU IN CONTROL?

The following statements can help you determine if you are in control of your high school education. If the statement is **TRUE**, place a check in the right-hand column. If the statement is **FALSE**, place a check in the left-hand column.

TRUE FALSE

1. ____ ____ I haven't given serious thought to selecting a course of study for my high school years.
2. ____ ____ I choose elective courses on the spur of the moment and usually select those which I believe will be easy.
3. ____ ____ I do not consider taking courses which will extend my educational reach.
4. ____ ____ I usually do not take advantage of the extra-curricular activities offered at my school.
5. ____ ____ I have never tried to organize my schedule and control my study time.
6. ____ ____ I know I can do better in my studies than I am presently doing.
7. ____ ____ I want to speak in class but I am shy.
8. ____ ____ I would like to spend more time studying but I find it boring.
9. ____ ____ After a few minutes of studying, I get anxious, restless, or agitated.
10. ____ ____ Other things seem to interrupt my study time and more often than not I do not try to eliminate these interruptions.
11. ____ ____ I would rather spend time with my friends "goofing off" rather than studying.
12. ____ ____ I have a tendency to fall asleep when I am trying to study.
13. ____ ____ I almost always put off assignments to the last possible minute.
14. ____ ____ I don't feel I have accomplished very much, if anything, when I study.
15. ____ ____ I am easily distracted when I attempt to study.

If you answered **TRUE** to any of these statements, you should examine your study habits. Study time does not have to be a time of misery. If you establish a study routine and stick to it (even though it may be difficult at first), you will begin to see better grades at school.

The following suggestions will provide a sense of direction for setting up a study schedule. You must remember, either you control your study time or it may control you.

HOW TO MANAGE YOUR TIME

Although you may have problems with studying, there are certain steps you can take to eliminate some of these obstacles. Listed below are some suggestions on how to structure your study time and create a more efficient system of study. But remember, you are the one who has full control of your study time. **HOW YOU USE THIS TIME IS YOUR RESPONSIBILITY.**

Suggestion One: PLAN

If you are going to change your study habits, set goals which are attainable. Determine how much time each day you wish to spend studying and go for that goal. Once you have reached this goal, you may wish to increase the amount of time you reserve for studying each day. Always start small and increase your time as you gain more confidence with your developing study skills.

SUGGESTION TWO: ORGANIZE

There is nothing more harmful to study skills than being disorganized. The best way to organize your study time is to have a certain place where you study: your bedroom, the kitchen table, the den. Make sure the place where you study is free from distractions.

Once you have decided where to study, set aside a certain time each day for studying. If you have a part-time job, you may have to change your study time on certain days. Don't let this bother you. Try and be consistent in the time of day at which you study.

Before you begin studying, make sure non-essential materials have been removed from your study area. This will help diminish the number of distractors in your study area. Also, it might be helpful to post a list of materials, such as pencils, pens, paper, etc., you will need during your study time. Make sure you have these items before you begin studying.

Another suggestion on how to organize your time is to list your subjects in the order in which you wish to study them. Subjects which give you the most difficulty might be the ones to study first. Once you have ranked your subjects in the order in which you wish to study them, follow this pattern every day. This will provide more structure to your study time. Also, it will cut down on the amount of time lost debating over which subject to study next.

SUGGESTION THREE: SELF-MOTIVATION

If there are activities which you like to do, complete your studies first. By engaging in activities after study time, the activities can serve as a reward for having completed your studies.

If you become uncomfortable while studying, it might help to take a short break. Get up and walk around the room, look out the window, or get something to drink. However, do not make this a long break. A short break, two or three minutes, may prevent you from becoming "overwhelmed" by your new study habits.

SUGGESTION FOUR: APPRAISE

One way to determine if you are meeting your goals is to evaluate daily study sessions. Keeping a daily log will allow you to determine if you are making progress or if you need to re-organize your study time. Don't be discouraged if you do not see significant changes at first. It takes time to develop successful study habits. **BE CONFIDENT! YOU WILL ACHIEVE YOUR GOALS!**

[adapted from How to Learn and Study in College, (1980) by Victor P. Maiorana. Englewood Cliffs, NJ: Prentice-Hall, Inc.]

LEARNING STYLE QUESTIONNAIRE

The way an individual learns is affected by various factors. These factors include environmental, emotional, sociological, and physical.

Environmental factors include sound, light, temperature, and design. Sound refers to amount of background noise you prefer in the room when you are studying. Light relates to the amount of light you prefer when studying: do you like the room to be bright or do you prefer the area to be somewhat dim? The amount of coldness or warmth in the room is temperature. Design is the position in which you study best. Do you prefer to sit up, lie down, study on the floor, on a couch, etc?

Emotional factors are motivation, persistence, responsibility, and structure. Motivation is how you feel about your school and the work associated with being successful. Persistence refers to the ability to complete a task once it has been started even though unforeseen obstacles may arise. Responsibility is the desire to do things without having to be told over and over again. Structure is the way in which you do things. Do you do exactly as told or do you like to work things out in the way easiest for you?

Sociological factors deal with the number of people you like to have around you when you are trying to study. Do you study best alone, with a friend, with a couple of friends, or with a grown-up present?

Physical factors are learning modalities, intake, mobility, and time. Learning modality refers to how you learn new materials best. The four learning modalities are auditory or hearing; visual or seeing; tactile or hands-on learning; and kinesthetic or a combination of auditory, visual, and tactile. Intake relates to the amount of food and drink you take into your body while you are studying. Mobility refers to how much movement you are comfortable with while studying. Do you prefer to be completely still or do you like to move around while studying? Time refers to the time of day in which you are best able to study and complete assigned tasks.

If you are not already aware, all of these factors influence the way in which you learn. Depending upon your own preferences, your learning style may differ greatly from that of a friend.

The following questionnaire is designed to help you develop a better understanding of how you learn best. After completing this activity you will better understand how you study and hopefully will be able to adjust your study habits to accommodate your learning style.

After you have completed the questionnaire, your teacher will lead you through an analysis of the results. After you have reviewed the results, you will be given an opportunity to complete a **Learning Style Profile**, which will give you the opportunity to summarize the results of the questionnaire.

DIRECTIONS: Answer each of the following questions as either TRUE or FALSE. Do not "think" through these questions. Answer them based upon your first impression. Thinking through the questions would cause modifications, exceptions, and limitations to the responses.

ENVIRONMENTAL STIMULI

I. SOUND

TRUE	FALSE		
____	____	1.	I study best when it is quiet.
____	____	2.	I can work with a little noise.
____	____	3.	I can block out noise when I work.
____	____	4.	Noise usually keeps me from concentrating.
____	____	5.	Most of the time I like to work with soft music.
____	____	6.	I can work with any kind of music.
____	____	7.	I often like to work with rock music playing.
____	____	8.	Music makes it difficult for me to work.
____	____	9.	I can work if people talk quietly.
____	____	10.	I can study when people talk.
____	____	11.	I can block out most sound when I study.
____	____	12.	It's difficult to block out TV when I study.
____	____	13.	Noise bothers me when I study.

II. LIGHT

TRUE	FALSE		
____	____	1.	I study best with lots of light.
____	____	2.	I study best when the lights are low.
____	____	3.	I like to read outdoors.
____	____	4.	I can study for a short time if the lights are low.
____	____	5.	When I study I put all the lights on.
____	____	6.	I read often in dim light.
____	____	7.	I usually study under a shaded lamp while the rest of the room is dim.

III. TEMPERATURE

TRUE FALSE

____ ____ 1. I can concentrate if I am warm.

____ ____ 2. I can concentrate if I am cold.

____ ____ 3. I usually feel colder than most people.

____ ____ 4. I usually feel warmer than most people.

____ ____ 5. I like the summer.

____ ____ 6. When it's cold outside I like to stay in.

____ ____ 7. When it's warm outside I like to stay in.

____ ____ 8. When it's hot outside I go out to play.

____ ____ 9. When it's cold outside I go out to play.

____ ____ 10. I find extreme heat or cold uncomfortable.

____ ____ 11. I like the winter.

IV. DESIGN

TRUE FALSE

____ ____ 1. When I study I like to sit on the floor.

____ ____ 2. When I study I like to sit on a soft chair or couch.

____ ____ 3. When I study I feel sleepy unless I sit on a hard chair.

____ ____ 4. I find it difficult to study at school.

____ ____ 5. I finish all my homework at home.

____ ____ 6. I always study for tests at home.

____ ____ 7. I finish all my homework in school.

____ ____ 8. I find it difficult to concentrate on my studies at home.

____ ____ 9. I work best in a library.

____ ____ 10. I can study almost anywhere.

____ ____ 11. I like to study in bed.

____ ____ 12. I like to study on carpeting or rugs.

____ ____ 13. I can study on the floor, in a chair, on a couch, and at my desk.

____ ____ 14. I often study in the bathroom.

EMOTIONAL STIMULI

I. MOTIVATION TOWARD SCHOOL WORK

TRUE FALSE

____ ____ 1. I feel good when I do well in school.

____ ____ 2. I feel good making my parents proud of me when I do well school.

____ ____ 3. My teacher feels good when I do well in school.

____ ____ 4. My parents are pleased if I bring home good reports.

____ ____ 5. My parents are pleased when I do well in school.

____ ____ 6. I like making someone feel proud of me.

____ ____ 7. I am embarrassed when my grades are poor.

____ ____ 8. It is more important to me to do well in things that happen out of school than in my school work.

____ ____ 9. I like making my teacher proud of me.

____ ____ 10. Nobody really cares if I do well in school.

____ ____ 11. My teacher cares about me.

____ ____ 12. My mother cares about my grades.

____ ____ 13. My father cares about my grades.

____ ____ 14. My teacher cares about my grades.

____ ____ 15. Somebody cares about my grades in school.

____ ____ 16. I want to get good grades for me!

____ ____ 17. I am happy when I do well in school.

____ ____ 18. I feel bad and work less when my grades are bad.

____ ____ 19. I feel happy and proud when my marks are good.

____ ____ 20. There are many things I like doing better than going to school.

____ ____ 21. I love to learn new things.

____ ____ 22. A good education will help me to get a good job.

II. PERSISTENCE

TRUE	FALSE		
___	___	1.	I try to finish what I start.
___	___	2.	I usually finish what I start.
___	___	3.	I sometimes lose interest in things I began to do and then stop doing them.
___	___	4.	I rarely finish things I start.
___	___	5.	I usually remember to finish my homework.
___	___	6.	I often have to be reminded to do my homework.
___	___	7.	I often forget to do or finish my homework.
___	___	8.	I often get tired of doing things and want to start something new.
___	___	9.	I usually like to finish things I start.
___	___	10.	My teacher is always telling me to finish what I'm supposed to do.
___	___	11.	My parent(s) remind me to finish things I have been told to do.
___	___	12.	Other grown-ups tell me to finish things I have started.
___	___	13.	Somebody's always reminding me to do something.
___	___	14.	I often get tired of doing things.
___	___	15.	I often want help in finishing things.
___	___	16.	I like getting things done!
___	___	17.	I like to get things done so I can start something new.
___	___	18.	I remember on my own to get things done.

III. RESPONSIBILITY

TRUE	FALSE		
____	____	1.	I think I am responsible.
____	____	2.	People tell me I am responsible.
____	____	3.	I always do what I promise to do.
____	____	4.	People say I do what I said I would do.
____	____	5.	I do keep my promises most of the time.
____	____	6.	I have to be reminded over and over again to do the things I've been told to do.
____	____	7.	If my teacher tells me to do something I try to do it.
____	____	8.	I keep forgetting to do the things I've been told to do.
____	____	9.	I remember to do what I'm told.
____	____	10.	People keep reminding me to do things.
____	____	11.	I like doing what I'm supposed to do.
____	____	12.	Promise have to be kept.
____	____	13.	I have to be reminded often to do something.

IV. STRUCTURE

TRUE	FALSE		
____	____	1.	I like to be told exactly what to do.
____	____	2.	I like to be able to do things in my own way.
____	____	3.	I like to be given choices of how I can do things.
____	____	4.	I like to be able to work things out for myself.
____	____	5.	I like other people to tell me how to do things.
____	____	6.	I do better if I know my work is going to be checked.
____	____	7.	I do the best I can whether or not the teacher will check my work.
____	____	8.	I hate working hard on something that isn't checked by the teacher.
____	____	9.	I like to be given clear directions when starting new projects.

SOCIOLOGICAL STIMULI

When I really have a lot of studying to do

TRUE FALSE

____ ____ 1. I like to work alone.

____ ____ 2. I like to work with my good friend.

____ ____ 3. I like to work with a couple of my friends.

____ ____ 4. I like to work in a group of five or six classmates.

____ ____ 5. I like to work with an adult.

____ ____ 6. I like to work with a friend but to have an adult nearby.

____ ____ 7. I like to work with a couple of friends but have an adult nearby.

____ ____ 8. I like adults nearby when I'm working alone or with a friend.

____ ____ 9. I like adults to stay away until my friends and I complete our work.

The thing I like doing best, I do

TRUE FALSE

____ ____ 10. alone.

____ ____ 11. with one friend.

____ ____ 12. with a couple of friends.

____ ____ 13. with a group of friends.

____ ____ 14. with a grown-up.

____ ____ 15. with several grown-ups.

____ ____ 16. with friends and grown-ups.

____ ____ 17. with a member of my family who is not a grown-up.

PHYSICAL STIMULI

I. PERCEPTUAL PREFERENCES

If I have to learn something new, I like to learn about it by:

TRUE FALSE

___ ___ 1. reading a book.

___ ___ 2. hearing a record or tape.

___ ___ 3. seeing a filmstrip.

___ ___ 4. seeing a movie.

___ ___ 5. looking at pictures and having someone explain them.

___ ___ 6. hearing my teacher tell me.

___ ___ 7. playing games.

___ ___ 8. going someplace and seeing for myself.

___ ___ 9. having someone show me.

The things I remember best are the things:

TRUE FALSE

___ ___ 10. my teacher tells me.

___ ___ 11. someone other than my teacher tells me.

___ ___ 12. someone shows me.

___ ___ 13. I learned about on trips.

___ ___ 14. I read.

___ ___ 15. I heard on records.

___ ___ 16. I heard on the radio.

___ ___ 17. I saw on television.

___ ___ 18. I wrote stories about.

___ ___ 19. I saw in a movie.

___ ___ 20. I tried or worked on.

___ ___ 21. my friends and I talked about.

I really like to:

TRUE FALSE

____ ____ 22. read books, magazines, or newspapers.
____ ____ 23. see movies.
____ ____ 24. listen to records.
____ ____ 25. make tapes on a recorder.
____ ____ 26. draw.
____ ____ 27. look at pictures.
____ ____ 28. play games.
____ ____ 29. talk to people.
____ ____ 30. listen to people talk.
____ ____ 31. listen to the radio.
____ ____ 32. watch television.
____ ____ 33. go on trips.
____ ____ 34. learn new things.
____ ____ 35. study with friends.
____ ____ 36. build things.
____ ____ 37. do experiments.
____ ____ 38. take pictures or movies.
____ ____ 39. use typewriters, computers, calculators, or other machines.
____ ____ 40. go to the library.
____ ____ 41. trace things in sand.
____ ____ 42. mold things with my hands.

II. INTAKE

TRUE FALSE

____ ____ 1. I like to eat, drink or chew while I study.

____ ____ 2. I dislike eating, drinking or chewing while I study.

3. While I am studying I like to:

____ ____ a. eat.

____ ____ b. drink.

____ ____ c. chew gum.

____ ____ d. nibble on snacks.

____ ____ e. suck on candy.

____ ____ 4. I can eat, drink or chew only after I finish studying.

____ ____ 5. I usually eat or drink when I'm nervous or upset.

____ ____ 6. I hardly ever eat when I'm nervous or upset.

____ ____ 7. I could study better if I could eat while I'm learning.

____ ____ 8. While I'm learning, eating something would distract me.

____ ____ 9. I often catch myself chewing on a pencil as I study.

III. TIME

TRUE	FALSE		
___	___	1.	I hate to get up in the morning.
___	___	2.	I hate to go to sleep at night.
___	___	3.	I could sleep all morning.
___	___	4.	I stay awake for a long time after I get into bed.
___	___	5.	I feel wide awake after 10:00 in the morning.
___	___	6.	If I stay up very late at night I get too sleepy to remember anything.
___	___	7.	I feel sleepy after lunch.
___	___	8.	When I have homework to do, I like to get up early in the morning to do it.
___	___	9.	When I can, I do my homework in the afternoon.
___	___	10.	I usually start my homework after dinner.
___	___	11.	I could stay up all night.
___	___	12.	I wish school would start near lunch time.
___	___	13.	I wish I could stay home during the day and go to school at night.
___	___	14.	I like going to school in the morning.
		15.	I can remember things when I study them:
___	___		a. in the morning.
___	___		b. at lunchtime.
___	___		c. in the afternoon.
___	___		d. before dinner.
___	___		e. after dinner.
___	___		f. late at night.

IV. Mobility

TRUE	FALSE		
____	____	1.	When I study, I often get up to do something (like take a drink, get some food, etc.) and then return to work.
____	____	2.	When I study, I stay with it until I am finished and then I get up.
____	____	3.	It's difficult for me to sit in one place for a long time.
____	____	4.	I often change my position when I study.
____	____	5.	I can sit in one place for along time.
____	____	6.	I constantly change position in my chair.
____	____	7.	I can study best for short amounts of time with breaks in between.
____	____	8.	I like getting my studies work done and over with.
____	____	9.	I like to study a little, stop, return to studying, stop, return to it again, and so forth.
____	____	10.	I like to stick to a job and finish it in one sitting if I can.
____	____	11.	I leave most jobs for the last minute and then have to work on them from beginning to end.
____	____	12.	I do most of my jobs a little at a time and eventually get them done.
____	____	13.	I enjoy doing something over and over again when I know how to do it well.
____	____	14.	I like familiar friends and places.
____	____	15.	New jobs and subjects make me nervous.

[adapted from Educator's Self-Teaching Guide to Individualizing Instruction Programs, (1975) by Rita and Kenneth Dunn. West Nyack, NY: Parker Publishing Company, Inc.]

HELPING STUDENTS DETERMINE THEIR LEARNING STYLE

The learning style of students depends greatly upon the response to each statement in the questionnaire. The following consistency key, which shows the affect of various stimuli, will help students determine their learning style.

While analyzing the questionnaire, students should be given the **LEARNING STYLE PROFILE** to complete also. Once the profile has been completed, students can then adjust their study habits to reflect how they learn best.

CONSISTENCY KEY

ENVIRONMENTAL STIMULI

Section I: SOUND

	The student needs silent or quiet areas for study if the statements were answered in the following manner.		Sound is acceptable or desirable during study time if the statements were answered in the following manner.
1	TRUE	1	FALSE
2	TRUE	2	TRUE
3	FALSE	3	TRUE
4	TRUE	4	FALSE
5	TRUE/FALSE	5	TRUE
6	FALSE	6	TRUE
7	FALSE	7	TRUE
8	TRUE	8	FALSE
9	FALSE	9	TRUE
10	FALSE	10	TRUE
11	FALSE	11	TRUE
12	TRUE	12	FALSE
13	TRUE	13	FALSE

Section II: LIGHT

The student requires a great deal of light during study time if the statements were answered in the following manner.

1	TRUE
2	FALSE
3	TRUE
4	TRUE
5	TRUE
6	FALSE
7	FALSE

The student does not need a great deal of light for study time if the statements were answered in the following manner.

1	FALSE
2	TRUE
3	FALSE
4	FALSE
5	FALSE
6	TRUE
7	TRUE

NOTE: If six or seven questions were marked either all TRUE or all FALSE, light is probably not a factor during study time.

Section III: TEMPERATURE

The student needs a cool environment in which to study if the statements were answered in the following manner.

1	FALSE
2	TRUE
3	FALSE
4	TRUE
5	FALSE
6	FALSE
7	TRUE
8	FALSE
9	TRUE
10	FALSE
11	TRUE

The student needs a warm environment in which to study if the statements were answered in the following manner.

1	TRUE
2	FALSE
3	TRUE
4	FALSE
5	TRUE
6	TRUE
7	FALSE
8	TRUE
9	FALSE
10	FALSE
11	FALSE

NOTE: Only temperature extremes are a factor if statements 3 and 4; 6 and 7; and 10 were answered **TRUE** and all other statements were **FALSE**.

Section IV: DESIGN

The student requires a formal design during study time if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	TRUE
4	FALSE
5	FALSE
6	FALSE
7	TRUE
8	TRUE
9	TRUE
10	FALSE
11	FALSE
12	FALSE
13	FALSE
14	FALSE

The student requires an informal design during study time if the statements were answered in the following manner.

1	TRUE
2	TRUE
3	FALSE
4	TRUE
5	TRUE
6	TRUE
7	FALSE
8	FALSE
9	FALSE
10	TRUE
11	TRUE
12	TRUE
13	TRUE
14	TRUE

EMOTIONAL STIMULI

Section I: MOTIVATION

Student is self-motivated if the statements were answered in the following manner.

1	TRUE
2	FALSE
3	FALSE
4	FALSE
5	FALSE
6	FALSE
7	FALSE
8	FALSE
9	FALSE
10	FALSE
11	FALSE
12	FALSE
13	FALSE
14	FALSE
15	FALSE
16	TRUE
17	TRUE
18	FALSE
19	TRUE
20	FALSE
21	TRUE
22	TRUE

Student is adult-motivated if the statements were answered in the following manner.

1	FALSE
2	TRUE
3	FALSE
4	TRUE
5	TRUE
6	TRUE
7	TRUE
8	FALSE
9	FALSE
10	FALSE
11	FALSE
12	TRUE
13	TRUE
14	FALSE
15	TRUE
16	FALSE
17	FALSE
18	FALSE
19	FALSE
20	FALSE
21	FALSE
22	FALSE

Section I: MOTIVATION (con'd)

Student is teacher-motivated if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	TRUE
4	FALSE
5	FALSE
6	TRUE
7	TRUE
8	FALSE
9	TRUE
10	FALSE
11	TRUE
12	FALSE
13	FALSE
14	TRUE
15	TRUE
16	FALSE
17	FALSE
18	FALSE
19	FALSE
20	FALSE
21	FALSE
22	FALSE

Student is unmotivated if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	FALSE
4	FALSE
5	FALSE
6	FALSE
7	FALSE
8	TRUE
9	FALSE
10	TRUE
11	FALSE
12	FALSE
13	FALSE
14	FALSE
15	FALSE
16	FALSE
17	FALSE
18	TRUE
19	FALSE
20	TRUE
21	FALSE
22	FALSE

Section II: PERSISTENCE

The student is very persistent if the statements were answered in the following manner.		The student is not persistent if the statements were answered in the following manner.	
1	TRUE	1	FALSE
2	TRUE	2	FALSE
3	FALSE	3	TRUE
4	FALSE	4	TRUE
5	TRUE	5	FALSE
6	FALSE	6	TRUE
7	FALSE	7	FALSE
8	FALSE	8	TRUE
9	TRUE	9	FALSE
10	FALSE	10	TRUE
11	FALSE	11	TRUE
12	FALSE	12	TRUE
13	FALSE	13	TRUE
14	FALSE	14	TRUE
15	FALSE	15	TRUE
16	TRUE	16	FALSE
17	TRUE	17	FALSE
18	TRUE	18	FALSE

Section III: RESPONSIBILITY

Student is responsible if the statements were answered in the following manner.		Student is not responsible if the statements were answered in the following manner.	
1	TRUE	1	FALSE
2	TRUE	2	FALSE
3	TRUE	3	FALSE
4	TRUE	4	FALSE
5	TRUE	5	FALSE
6	FALSE	6	TRUE
7	TRUE	7	FALSE
8	FALSE	8	TRUE
9	TRUE	9	FALSE
10	FALSE	10	TRUE
11	TRUE	11	FALSE
12	TRUE	12	FALSE
13	FALSE	13	TRUE

Section IV: STRUCTURE

The student needs structure for school work if the statements were answered in the following manner.

The student does not need structure for school work if the statements were answered in the following manner.

1	TRUE	1	FALSE
2	FALSE	2	TRUE
3	FALSE	3	TRUE
4	FALSE	4	TRUE
5	TRUE	5	FALSE
6	TRUE	6	FALSE
7	FALSE	7	TRUE
8	TRUE	8	TRUE
9	TRUE	9	FALSE

SOCIOLOGICAL STIMULI

The student prefers working, learning, or studying alone if the statements were answered in the following manner.

The student prefers working, learning, or studying with one peer if the statements were answered in the following manner.

1	TRUE	1	FALSE
2	FALSE	2	TRUE
3	FALSE	3	FALSE
4	FALSE	4	FALSE
5	FALSE	5	FALSE
6	FALSE	6	FALSE
7	FALSE	7	FALSE
8	TRUE	8	TRUE
9	FALSE	9	FALSE
10	TRUE	10	FALSE
11	FALSE	11	TRUE
12	FALSE	12	FALSE
13	FALSE	13	FALSE
14	FALSE	14	FALSE
15	FALSE	15	FALSE
16	FALSE	16	FALSE
17	FALSE	17	TRUE

SOCIOLOGICAL STIMULI (con'd)

The student prefers working, learning, or studying with two peers if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	TRUE
4	FALSE
5	FALSE
6	FALSE
7	FALSE
8	FALSE
9	TRUE
10	FALSE
11	FALSE
12	TRUE
13	FALSE
14	FALSE
15	FALSE
16	FALSE
17	FALSE

The student prefers working, learning, or studying with several peers if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	FALSE
4	TRUE
5	FALSE
6	FALSE
7	FALSE
8	FALSE
9	TRUE
10	FALSE
11	FALSE
12	FALSE
13	TRUE
14	FALSE
15	FALSE
16	FALSE
17	FALSE

The student prefers working, learning, or studying with adults present if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	FALSE
4	FALSE
5	TRUE
6	FALSE
7	FALSE
8	FALSE
9	FALSE
10	FALSE
11	FALSE
12	FALSE
13	FALSE
14	TRUE
15	TRUE
16	FALSE
17	FALSE

The student prefers working, learning, or studying with peers and having adults present if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	FALSE
4	FALSE
5	FALSE
6	TRUE
7	FALSE
8	FALSE
9	FALSE
10	FALSE
11	FALSE
12	FALSE
13	FALSE
14	FALSE
15	TRUE
16	TRUE
17	FALSE

PHYSICAL STIMULI

Section I: PERCEPTUAL PREFERENCES

	The student learns best through auditory processes if the statements were answered in the following manner.		The student learns best through visual processes if the statements were answered in the following manner.
1	FALSE	1	TRUE
2	TRUE	2	FALSE
3	FALSE	3	TRUE
4	TRUE	4	TRUE
5	TRUE	5	TRUE
6	TRUE	6	FALSE
7	FALSE	7	TRUE
8	FALSE	8	FALSE
9	FALSE	9	TRUE
10	TRUE	10	FALSE
11	TRUE	11	FALSE
12	FALSE	12	TRUE
13	FALSE	13	FALSE
14	FALSE	14	TRUE
15	TRUE	15	FALSE
16	TRUE	16	FALSE
17	TRUE	17	TRUE
18	TRUE	18	FALSE
19	FALSE	19	TRUE
20	FALSE	20	FALSE
21	FALSE	21	FALSE
22	FALSE	22	TRUE
23	FALSE	23	TRUE
24	TRUE	24	FALSE
25	FALSE	25	FALSE
26	FALSE	26	FALSE
27	FALSE	27	TRUE
28	FALSE	28	FALSE
29	TRUE	29	FALSE
30	FALSE	30	FALSE
31	TRUE	31	FALSE
32	FALSE	32	TRUE
33	TRUE	33	FALSE
34	FALSE	34	FALSE
35	TRUE	35	FALSE
36	FALSE	36	FALSE
37	FALSE	37	FALSE
38	FALSE	38	FALSE
39	FALSE	39	FALSE
40	FALSE	40	TRUE
41	FALSE	41	FALSE
42	FALSE	42	FALSE

Section I: PERCEPTUAL PREFERENCES (con'd)

The student learns best through tactile processes if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	FALSE
4	FALSE
5	FALSE
6	FALSE
7	TRUE
8	FALSE
9	FALSE
10	FALSE
11	FALSE
12	FALSE
13	FALSE
14	FALSE
15	FALSE
16	FALSE
17	FALSE
18	TRUE
19	FALSE
20	FALSE
21	FALSE
22	FALSE
23	FALSE
24	FALSE
25	FALSE
26	TRUE
27	FALSE
28	FALSE
29	FALSE
30	FALSE
31	FALSE
32	FALSE
33	FALSE
34	FALSE
35	FALSE
36	TRUE
37	FALSE
38	FALSE
39	FALSE
40	FALSE
41	TRUE
42	TRUE

The student learns best through kinesthetic processes if the statements were answered in the following manner.

1	FALSE
2	FALSE
3	FALSE
4	FALSE
5	FALSE
6	FALSE
7	FALSE
8	TRUE
9	FALSE
10	FALSE
11	FALSE
12	FALSE
13	TRUE
14	FALSE
15	FALSE
16	FALSE
17	FALSE
18	FALSE
19	FALSE
20	TRUE
21	FALSE
22	FALSE
23	FALSE
24	FALSE
25	TRUE
26	FALSE
27	FALSE
28	TRUE
29	FALSE
30	FALSE
31	FALSE
32	FALSE
33	TRUE
34	FALSE
35	FALSE
36	FALSE
37	TRUE
38	TRUE
39	TRUE
40	FALSE
41	FALSE
42	FALSE

Section II: INTAKE

	The student requires intake while studying if the statements were answered in the following manner.	The student does not require intake while studying if the statements were answered in the following manner.
1	TRUE	FALSE
2	FALSE	TRUE
3	a. TRUE	a. FALSE
	b. TRUE	b. FALSE
	c. TRUE	c. FALSE
	d. TRUE	d. FALSE
	e. TRUE	e. FALSE
4	FALSE	TRUE
5	TRUE	FALSE
6	FALSE	TRUE
7	TRUE	FALSE
8	FALSE	TRUE
9	TRUE	FALSE

Section III: TIME

	The student studies best in early morning if the statements were answered in the following manner.	The student studies best in late morning if the statements were answered in the following manner.
1	FALSE	FALSE
2	FALSE	FALSE
3	FALSE	FALSE
4	FALSE	FALSE
5	FALSE	TRUE
6	FALSE	FALSE
7	FALSE	FALSE
8	TRUE	FALSE
9	FALSE	FALSE
10	FALSE	FALSE
11	FALSE	FALSE
12	FALSE	TRUE
13	FALSE	FALSE
14	TRUE	FALSE
15	a. TRUE	a. FALSE
	b. FALSE	b. TRUE
	c. FALSE	c. FALSE
	d. FALSE	d. FALSE
	e. FALSE	e. FALSE
	f. FALSE	f. FALSE

Section III: TIME (con'd)

	The student studies best in the afternoon if the statements were answered in the following manner.		The student studies best in the evening if the statements were answered in the following manner.
1	FALSE	1	FALSE
2	FALSE	2	TRUE
3	TRUE	3	FALSE
4	FALSE	4	TRUE
5	TRUE	5	TRUE
6	FALSE	6	FALSE
7	FALSE	7	FALSE
8	FALSE	8	FALSE
9	TRUE	9	FALSE
10	FALSE	10	TRUE
11	FALSE	11	TRUE
12	TRUE	12	FALSE
13	FALSE	13	TRUE
14	FALSE	14	FALSE
15	a. FALSE	15	a. FALSE
	b. FALSE		b. FALSE
	c. TRUE		c. FALSE
	d. TRUE		d. FALSE
	e. FALSE		e. TRUE
	f. FALSE		f. TRUE

NOTE: A fairly equal distribution among all four categories usually indicates the time of day or night is not an important factor in setting up a study schedule.

Section IV: MOBILITY

The student needs mobility while studying if the statements were answered in the following manner.		The student does not need mobility while studying if the statements were answered in the following manner.	
1	TRUE	1	FALSE
2	FALSE	2	TRUE
3	TRUE	3	FALSE
4	TRUE	4	FALSE
5	FALSE	5	TRUE
6	TRUE	6	FALSE
7	TRUE	7	FALSE
8	FALSE	8	TRUE
9	TRUE	9	FALSE
10	FALSE	10	TRUE
11	FALSE	11	TRUE
12	TRUE	12	FALSE
13	FALSE	13	TRUE
14	FALSE	14	TRUE
15	FALSE	15	TRUE

[adapted from Educator's Self-Teaching Guide to Individualizing Instruction Programs, (1975) by Rita and Kenneth Dunn. West Nyack, NJ: Parker Publishing Company, Inc.

LEARNING STYLE PROFILE

Name____

Grade________________________ Class___________________________

ENVIRONMENTAL STIMULI

Sound____

Light____

Temperature______________________________________

Design____

EMOTIONAL STIMULI

Motivation_______________________________________

Persistence______________________________________

Responsibility___________________________________

Structure____

SOCIOLOGICAL STIMULI

Works Best_______________________________________

PHYSICAL STIMULI

Perceptual Preferences___________________________

Nutritional Intake_______________________________

Time____

Mobility____

ADDITIONAL COMMENTS

[adapted from Educator's Self-Teaching Guide to Individualizing Instruction Programs, (1975) by Rita and Kenneth Dunn. West Nyack, NY: Parker Publishing Company, Inc.]

WEEKLY ACTIVITY LOG **WEEK OF** ____________ **TO** ____________

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
6-7 a.m.							
7-8 a.m.							
8-9 a.m.							
9-10 a.m.							
10-11 a.m.							
11-12 noon							
12-1 p.m.							
1-2 p.m.							
2-3 p.m.							
3-4 p.m.							
4-5 p.m.							
5-6 p.m.							
6-7 p.m.							
7-8 p.m.							
8-9 p.m.							
9-10 p.m.							
10-11 p.m.							
11-12 a.m.							

WEEKLY ACTIVITY LOG WEEK OF __________ TO __________

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
6-7 a.m.							
7-8 a.m.							
8-9 a.m.							
9-10 a.m.							
10-11 a.m.							
11-12 noon							
12-1 p.m.							
1-2 p.m.							
2-3 p.m.							
3-4 p.m.							
4-5 p.m.							
5-6 p.m.							
6-7 p.m.							
7-8 p.m.							
8-9 p.m.							
9-10 p.m.							
10-11 p.m.							
11-12 a.m.							

Keynote Address1989 Annual Conference of the Personnel and Training Associations of Anderson, Oconee, and Pickens Counties, South Carolina

Tri-County Technical College, Pendleton, South Carolina
August 22, 1989
William A. Dealy, Jr.,
Regional Management Analyst and Coordinator for Research, Demonstrations, and Evaluations,
U.S. Department of Labor, Employment and Training Administration, Region IV, Atlanta, Georgia

I. INTRODUCTION:

President Garrison, Mr. Mooneyhan, Honored Guests, Conference Participants...

It is a pleasure to be here today and to have the opportunity to share with you some thoughts about the challenges you and I, indeed all Human Resource professionals, face as we approach the turn of the century.

Over the past couple of years governmental, academic, civic, and business leaders and organizations have begun to voice concern over emerging demographic, economic, and social trends which are occurring...

- Trends which are already impacting on our international, national, regional, state, and local economies and labor markets.

The Department of Labor has sought to provide leadership to this growing effort by guiding these various interests, as well as the public-at-large, in planning for potential workforce problems.

For the next few minutes allow me to share with you some personal thoughts concerning...

the changes and challenges affecting the workforce;

the magnitude and urgency of these challenges; and

your role in helping South Carolina "BUILD A QUALITY WORKFORCE."

II. The changes and challenges affecting the workforce:

Since 1986 the Department of Labor and many other public and private interests have published many reports concerning the emerging demographic, economic, and social trends impacting on us.

For example...

The research report of the Hudson Institute commissioned by DOL called **"Workforce 2000: Work and Workers for the 21st Century."**

The projections of the Bureau of Labor Statistics as published in **"Projections 2000"** (Occupational Outlook Quarterly, Fall of 1987) and as a special Bulletin (number 2302 issued March 1988)

"Shadows in the Sunbelt" (MDC, Inc., N. Carolina)

"Halfway Home and a Long Way to Go" (Report of the 1986 Commission on the Futhure of the South)

"Meeting the Economic Challenge of the 1990s: Workforce Literacy in the South" (Report by MDC, Inc. for the Sunbelt Institute)

As well as our Regional focus reports...

"Looking To The Year 2000: A View From The Southeast"

"The Southeast 21st Challenge: Its Need To Build A Quality Workforce" (Currently in draft)

The issues and projections discussed in these various reports can be summarized as four trends................

TREND 1:

There will continue to be significant geographic and occupational shifts in employment as the availability of jobs diminishes in goods-producing industries and increases in service-producing industries.

For Example:

Geographically...

- The population and workforce shifts from the northern and midwest States to the southern and western States will continue.

  By year 2000, 2/3 of the nation's population will live in the south and 18 out of every 100 people will live in the eight Southeastern States.

  1 out of every 100 people will live here in South Carolina

Occupationally...

- Between now and year 2000,

  8 out of every 10 new jobs created in the South Carolina economy will be in the service-producing industries;

	1970	1987	2000
Goods-producing	42%	32%	29%
Service-producing	58%	68%	71%

Closer to home...

The Greenville-Spartanburg N.C. and Anderson S.C. MSAs will experience similar shifts.

By year 2000...

> 61% of employment in the Anderson MSA ...and...
> 63% the Greenville-Spartanburg MSA will be in the service-producing sector.

While some 61,000 new jobs are projected to be added within the service-producing industries of the 2 MSAs between now and the year 2000...

Over 14,000 jobs will also be added in the goods-producing sector (primarily in Manufacturing and Construction)

> Total new jobs...both MSAs = 75,000 (1987-2000)
> 8 of 10 Service-producing

In terms of occupational fields...

8 out of every 10 new jobs in the service, sales, professional, managerial, and administrative support fields.

Trend 2:

The population and its resulting workforce will grow more slowly and the pool of young workers entering the labor market will shrink while the average age of the workforce will rise significantly.

For Example:

- The average annual rate of growth of South Carolina's population will decline from 2% a year to less than 1% per year, and

  the workforce will expand at an average annual rate of about 1.1% (down from 2.9%)

- Between now and the year 2000 the number of young workers (age 15-24) entering South Carolina's labor market will decline 9% (about 51,000).

  The traditional college age population (age 19-24) here in South Carolina will decline 14% (73% of this decline will be in the white student population).

  By the year 2000, more than 1 in 3 people in the state's college age population will be nonwhite.

- Finally, by the year 2000, the average age of the state's population will rise to 36, and to 38 for the workforce.

	Anderson MSA	Greenville/Spartanburg MSA
Annual rate of growth:		
Population	.9% (down from 2.3%)	.8% (down from 1.7%)
Workforce	1.3% (from 2.6%)	.8% (from 2.5%)
# persons age 15-24	- 14% (-3,000)	- 6% (-7,000)
Traditional college age	- 20% (-2,000)	- 9% (-5,000)
Average age		
population	39	36
workforce	41	38

Trend 3:

The workplace will see more women, minorities, disabled, and immigrants than ever before in its history.

For Example:

- **Here in South Carolina between now and the year 2000...**

  almost 9 out of every 10 new entrants will be female, minority, and/or immigrant

  46% of the new entrants into the workforce will be female

  42% will be nonwhite

Breakdown of new entrants (South Carolina)...

White male	31%
White female	27%
Nonwhite male	22%
Nonwhite female	20%

Breakdown of new entrants

	Anderson MSA	Greenville MSA
Female	47%	47%
Nonwhite	28%	14%
White male	38%	45%
White female	34%	41%
Nonwhite male	15%	8%
Nonwhite female	13%	7%

Trend 4:

Tomorrow's jobs will demand higher cognitive abilities and talents; and will continue to evolve, requiring constant training and upgrading of skills.

For example:

Here in South Carolina....

The number of jobs which require 4 or more years of college education will increase 45%

Jobs in professional occupations requiring a college degree will increase about 1/3rd

Technician jobs and service jobs requiring college level education will increase 50%

and all jobs will require higher levels of math, reading, and reasoning skills.

The average new job being created here in South Carolina requires about 14 years of formal education and a GED skill level of 3 or more. That means entrants are expected to ...

- **Be able to reason through a variety of work situations without standard solutions;**
- **Interpret instructions involving written, oral, and diagrammatic form;**

- Perform arithmetic, algebraic, and geometric operations; and
- Read, write, and speak on a variety of subjects of considerable complexity.

Our country's ability to compete internationally largely depends on the productivity of our workforce.

In order for American employers to compete successfully in the global market, they must first compete successfully for workers in the labor market.

This means issues once defined as social problems must now be dealt with out of economic necessity.

As the labor market tightens each perspective qualified applicant, as well as each current employee, becomes more valuable; the loss of either could be very costly. Therefore, no employer, public or private, can afford to...

- discriminate,
- put workers at health and safety risks,

- ignore training needs and workers' obligations to family, or

- fail to focus on human resource management and development.

For us here today, the paramount challenge we face in our quest to "*Build A Quality Workforce*," nationally, as well as at the State and local level, is the training and development of our human capital.

With respect to this challenge...

Currently, over 1 million South Carolinians, an estimated 41% of the State's adult population age 20 and over, are educationally limited. These individuals...

Do not have "the ability to use printed and written information to function in society, achieve their goals, or develop their knowledge and potential."

Most of these adults cannot...

- state in writing an argument made in a newspaper column,
- orally interpret a lengthy feature story in a newspaper,
- interpret the distinctions between two types of employee benefits,
- follow directions to travel from one location to another using a map,
- use a bus schedule,
- determine correct change using a simple restaurant menu, and/or
- determine the amount of interest charges from a loan ad.

Furthermore, 40% of these educationally limited adults are in the State's workforce and employed.

Global competitiveness and productivity growth can be accomplished only if we identify and develop those educationally limited adults who are currently employed and thereby upgrade the quality of our present workforce.

While current emphasis on educational reform is important, particularly as it relates to improving the quality of education for at-risk groups and curbing the high school dropout rates...

Our economic success depends more on our ability to reach and upgrade the skills of those educationally limited adults already in our workforce.

The "Basic Skills Gap" between workforce (Job/employer) **needs and the qualifications of the entry-level workers available** (both inside and outside the current workforce) **is widening.**

A current DOL/ASTD research initiative has identified seven skill groups relating to the workplace. Employers are telling us they want employees who...

- **Know how to learn** (Learning to learn);
- **Have competence in the basics of reading, writing, computation;**
- **Have good communication skills** (Listening and oral communication);

- **Are adaptable**
  (Can think creatively and problem solve);

- **Have personal management skills**
  (Self esteem, goal setting/motivation, and personal/career development);

- **Are effective in groups**
  (Interpersonal skills, negotiation and teamwork);

- **And, can influence others**
  (Organizational effectiveness and leadership).

However...

Only 5-7% of our high school graduates can:

- **synthesize and learn from specialized reading materials,**

- **solve multi-step math problems and use algebra,**

- **and, infer relationships and draw conclusions using detailed scientific knowledge.**

The mean educational attainment level of the current civilian non-labor force is 12.0 with an estimate mean GED skill level under 3.

Note: Civilian non-labor force Ed. Attain. Levels for...

White males = 11.9
Non-white males = 9.7
White females = 12.2
Non-white females = 10.7

Furthermore, the mean educational attainment level of our current civilian labor force is only 12.8 with a mean GED skill level of 3.

Note: Civilian labor force Ed. Attain. Levels for...

White males = 12.8
Non-white males = 12.4
White females = 12.8
Non-white females = 12.6

Additionally, only 55% of all employees come to their job with sufficient qualifying training and only 29% of these workers received their training from schools.

Simply put...

The competencies of many current workers are deficient.

Not only with regard to the basic skills of reading, writing, mathematics, and communications; but also in the "New Basics" of...

Problem-solving, team work, initiative, reasoning, and adaptability.

Employees' skill deficiencies currently cost South Carolina employers, public and private, an estimated $3.7 million annually in...

- Higher turnover,
- More absenteeism,
- Higher rates of injuries on the job,
- Waste,
- Lost productivity,
- Increased costs for remediation,
- Reduced product quality, and
- Ultimately a loss in competitiveness.

If we are to close the skills gap and build the quality workforce we need,

Employers must...

- **Do a better job of anticipating workforce needs;**
- **More accurately determine the knowledge, skill, and ability requirements of the jobs to be filled; and,**
- **Institute creative initiatives to attract and retain entry level workers and enhance the job readiness and skills of both new hires and current workers.**

Note:

A recent study of key employers in a major Southeast metropolitan area found that:

- 1/4 had no formalized system of forecasting human resource needs, and
- 40% utilized no procedures to assess the developmental needs of their current employees.
- Even more important, less than 1 in 10 key employers provide Basic Skills training to employees in need of such training.

Not only must employers do a better job of anticipating and planning workforce needs; adequately identifying the true knowledge, skill, and ability requirements of their jobs; and assess the developmental needs of their current employees...

They must communicate these needs and workplace requirements to employees, educators, students, parents, and others in the community who may help address these needs.

Educators, on the other hand, need to...

- Listen to employers and seek their guidance as to the knowledge, skill, ability, and other requirements of the workplace, and
- Do a better job of translating these workplace needs into the learning environment, curriculum, and education programs for both youth and adults.

Employers and educators must reduce the isolation of their worlds and forge collaborative endeavors to establish programs to deliver workplace basics and improve the quality of both our future and current workforce.

It is important to note that the study findings just mentioned concerning employers' forecasting of human resource needs and the development of employees related to large employers, those employing 250 or more employees...

The Workforce 2000 trends and the challenges they present are impacting even more on the small to medium size employer.

While small businesses employ 2/3 of all entry-level workers...and over half of the new jobs which will be created in our economy between now and the year 2000 will be in small firms...

1 in 4 small companies surveyed by the National Federation of Independent Businesses say they can't find qualified workers.

Furthermore, small firms tend to have fewer resources available for human resource management and development activities.

Here then is where the need for innovative employer-educator collaborations becomes critical.

Educators, particularly those experienced in adult programs and adult learning, can provide the small firm employer valuable assistance on how to identify and develop employees who may need basic skill enhancement.

Working together through local Chambers-of-Commerce, local Private Industry Councils, and similar networks, the adult educational system and employers can establish "Human Capital Development Centers"...Consortiums designed to provide small to medium size employers, public and private, technical assistance...

- in forecasting human resource needs,
- in analyzing jobs to determine their knowledge, skill, and ability requirements, and
- in conducting literacy audits and training needs assessments.

Such consortiums then may facilitate the actual provision of required training at minimum cost to employers.

Tri-County Technical College, like some of its sister institutions in other parts of the country, is leading the way in forging employer-education cooperative ventures, as well as in developing other innovative avenues to meet the demand for qualified workers.

I commend the efforts being undertaken here in the Tri-County area...

- The schools tie-in with the Southeast Manufacturing Technology Center at the University of South Carolina and the Technology Transfer service being provided;
- The articulation of courses in tech/voc. centers and high schools to ease transition of secondary students into Tri-County;
- The activities launched through the Partnership for Academic and Career Education program;
- The opening of your Enterprise Center;
- The Special Schools program;
- The Homemakers and Single Parent program;
- as well as other innovative, trend setting initiatives being planned.

With almost 9 out of every 10 new entrants into our workforce coming from groups in our population which have been traditionally underutilized and/or suffer educational or other job readiness limitations..

The two year post-secondary educational institution is in the unique position of helping to prepare a large portion of our future workforce.

For example...

Here is South Carolina

- 55% of those enrolled in post-secondary education are female and 21% are minority.
- 40% of these minority post-secondary students are enrolled in two year programs.
- In terms of degrees confered...

  59% of all Associate degrees awarded in South Carolina go to females and 25% go to minorities.

Two year institutions like Tri-County, therefore, have been on the cutting edge of not only the employer-education link, but also in the providing of quality education to females and minorities.

More importantly however, pioneering institutions such as Tri-County are continuing to seek out and employ alternative avenues to educate our future workforce.

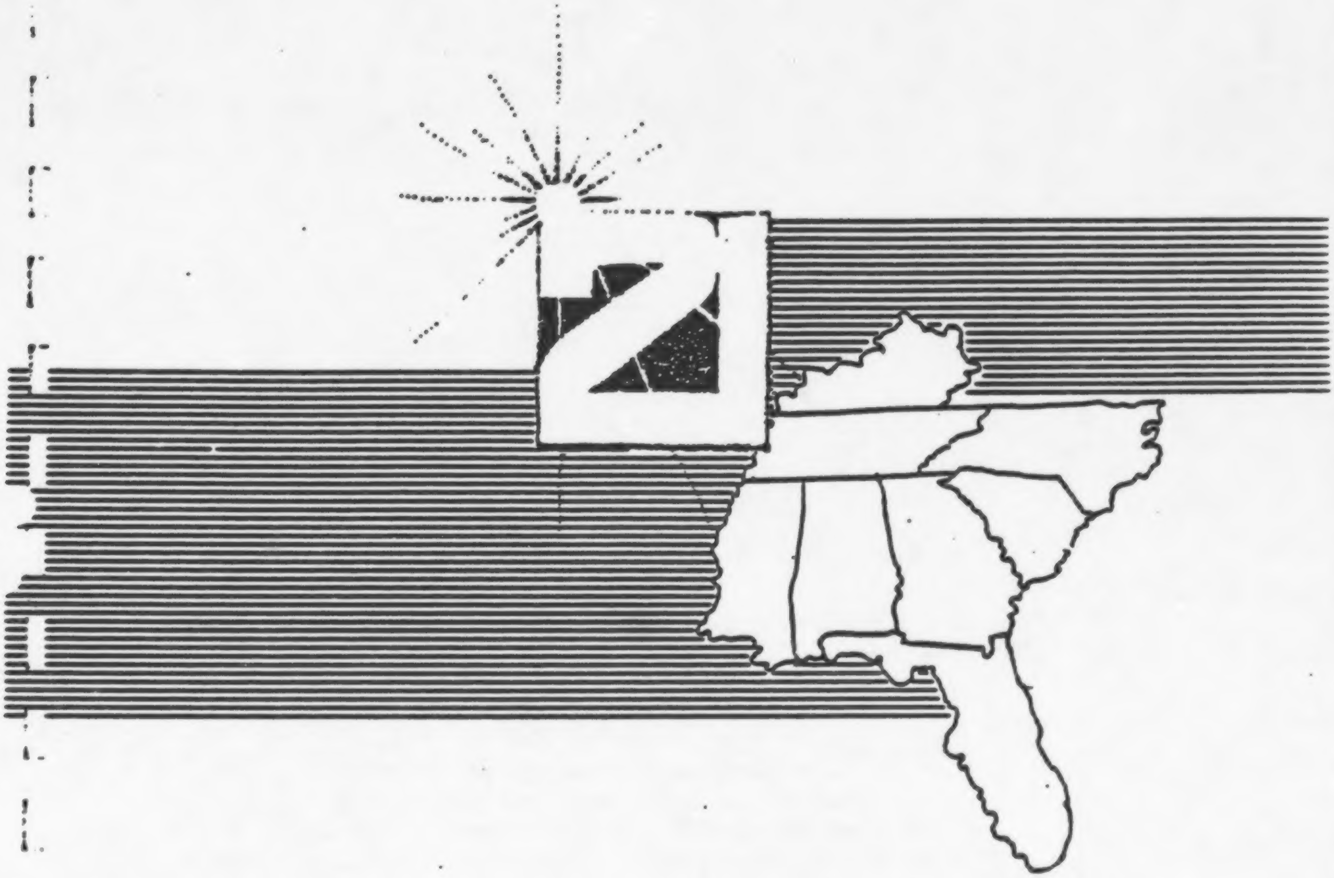
For all of us here today then, our challenge is straight forward...

To join together and continue walking new paths, free from territorial and philosophical barriers.

Paths eliminated through enlightened creativity and an entrepreneurial spirit.

Paths which lead to the educational growth and enrichment of our human resources and ultimately to the *"Building of A Quality Workforce."*

Thank you.



The Southeast's 21st Challenge

This is a joint awareness initiative of the Southeast Regional Offices of the...

United States Department of Labor
United States Department of Education
United States Office of Personnel Management
United States Department of Health and Human Services

....The Need To Build A Quality Workforce

EDITORIAL COMMENT

This special report has been prepared to help build awareness of the demographic, economic, and social trends which are impacting our nation, region, state, and lo l economies. The analysis and data presented are the product of a broad-bas multifaceted and interdisciplinary research project. While a considerable amount of th data and information used came from the U. S. Bureau of Labor Statistics and the U. S. Bureau of the Census, the primary data source used for the regional demographic and economic projections presented was the *Regional Economic Projections Series 87-R-2, Regional Economic Growth in the United States* published by NPA Data Services, Inc. In addition, data was also obtained through extensive literature research and with the assistance of various other reliable academic and professional sources. While it is not possible to identify here all the individuals and organizations who provided input for this report, special appreciation is expressed to the following individuals and their organizations for the support and assistance they provided during this project:

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The primary focus of this report is to build awareness of how various demographic, economic, and social trends are being reflected in the region. Therefore, this report is designed to be a tool which state and local, public and private officials can use in developing a strategy for coordinated action. The figures presented should be considered as reasonably accurate estimates and indicators of economic, demographic and social trends projected at a given time and based upon currently available data.

For further information regarding this study, please contact William A. Dealy, Jr., Regional Management Analyst and Coordinator for Research, Demonstrations, and Evaluations, U. S. Department of Labor (DOL), Employment and Training Administration (ETA), Management Data Systems and Analysis Unit (MDS&A), 1371 Peachtree Street, N.E., Room 400, Atlanta, Georgia, (404) 347-3534.

PREFACE - DEPARTMENT OF LABOR

During her confirmation hearing, Secretary of Labor Elizabeth Dole emphasized that the mission of the U. S. Department of Labor must be to coordinate a strategy of "*growth plus*." That is, the Department's programs and activities must continue to support the economic growth our nation has realized over the recent years and at the same time provide help to those for whom the jobs of the future are now out of reach because of a skill gap, family pressures, or the lack of supportive government policies.

As Mrs. Dole put it, "We have within our reach the fulfillment of a long-awaited dream...that every American who wants a job can have a job. But, to fulfill that dream for many Americans, we must bring about timely and coherent intervention...not simply by government, but through the cooperation of private enterprise, unions, schools, and community leaders..."

Today, under Secretary Dole's leadership, the mission of the U. S. Department of Labor encompasses five major objectives: first, to ensure that American workers are the world's best trained and most highly skilled; second, to develop and implement policies that make work and family complementary rather than competing activities; third, to develop a sound and comprehensive pension policy that brings a measure of rationality to the demographic and social changes now upon us; fourth, to ensure that the American workplace is as safe and secure as we can make it; and finally, to see that relationships between management and labor move beyond the tradition of advocacy and conflict...beyond confrontation...toward productive and affirmative cooperation on behalf of interests held in common.

Each of the U. S. Department of Labor's respective Southeast Regional Offices, including the Employment and Training Administration (ETA), the Bureau of Labor Statistics (BLS), the Employment Standards Administration (ESA), the Occupational Safety and Health Administration (OSHA), the Bureau of Apprenticeship and Training (BAT), and the Women's Bureau (WB), have sought to involve themselves in, and inform their respective constituency of, the Secretary's concerns and the "*Workforce 2000*" issues. Speeches have been made, conferences held, and reports written...all to heighten the awareness of southeastern public and private sector leaders of the demographic, economic, and social trends which are impacting on the region. All of these efforts are laudable, but the message of the region's need to "*Build a Quality Workforce*" must reach even farther...to all employers, public and private, to all levels of the education community, to every citizen.

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The following special report seeks not only to acquaint those who read it with the demographic, economic, and social trends occurring in the Southeast and to share some thoughts concerning....

> The changes and challenges facing the Southeast Region's economy and labor markets;
>
> The magnitude and urgency of these challenges; and
>
> The region's need to ***"BUILD A QUALITY WORKFORCE;"***
>
> But, also to encourage collaborative endeavors to ensure the development of that quality workforce.

The Southeast Regional offices of the U. S. Department of Labor are pleased to join with the Southeast Regional offices of the Department of Education, the Department of Health and Human Services, and the U. S. Office of Personnel Management in this important mission.

Daniel L. Lowry
Regional Administrator
U. S. Department of Labor
Employment and Training Administration
Region IV
Atlanta, Georgia

PREFACE - DEPARTMENT OF EDUCATION

The foundation of a quality workforce and a healthy, vigorous economy depends on the ability of our nation's school systems to provide the basic reading, writing, and mathematical skills, as well as an appreciation for the work ethic, which our young people must possess to perform effectively in the workplace of the 21st century.

The goal of public education incorporates, of course, issues much larger than economic ones. We intend, hopefully, to prepare our young children for a full and successful life as citizens in their community. Nevertheless, our economic activity as individuals and as participants in the larger community represents a significant and fundamental facet o full and happy life.

In this respect we face an epidemic which if not reversed will alter our civil live irrevocably. That epidemic is the continued widening of the gap between the skil needed in the workplace and the readiness of new, entry-level workers. Simply put, are undereducating millions of young children and preparing them for lives not success but of failure. It is therefore urgent that we listen to the voice of Labor and confront the challenges identified in this statistical analysis and report on the trends already impacting on our regional, state and local economies and labor markets.

Happily, we are beginning to listen to these voices from the workplace and, as a Federal agency, we recognize that collaboration with the U. S. Departments of Labor and Health and Human Services, as well as the U. S. Office of Personnel Management, allows the Department of Education to incorporate their valuable input and insights into a national agenda for education reform and improvement.

Jack Will
Secretary's Regional Representative
Region IV
U.S. Department of Education
Atlanta, Georgia

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PREFACE - DEPARTMENT OF HEALTH AND HUMAN SERVICES

A young girl 13 years of age contemplates suicide when she discovers she is pregnant...a teen experimenting with drugs contracts AIDS from sharing needles...a baby fights for its life in a neonatal intensive care unit following its birth to a mother who was too poor to afford any prenatal care...and, a social security applicant fails to properly complete his application because he can not read and understand it. These are but a few examples of the types of issues with which the U. S. Department of Health and Human Services deals daily in carrying out its mission of providing quality health and safety to our citizens.

Yet, the impact of the issues and problems exemplified will significantly influence the quality and composition of our workforce in the year 2000 and beyond. To have a quality workforce in the 21st Century, a variety of programs and services must be available and affordable to all Americans, including minorities and the disadvantaged, so that each child born in America has the opportunity to advance and mature into responsible adults.

Our Secretary, Louis W. Sullivan, a physician and educator, is committed to an agenda that promises a better future for our children, teenagers and young adults now and for generations to come. His vigorous endorsement of the Head Start program, the lowering of infant mortality, the reduction of adolescent pregnancies, drug abuse and alcohol use, the JOBS program, and a strong bio-medical research effort, hold promise for a better educated and healthier workforce in the next century.

We are pleased to join the Departments of Labor and Education, and the U. S. Office of Personnel Management in issuing this special joint awareness report. Together we hope to address the many issues confronting our nation to insure that we generate a population capable of meeting the challenges of the future.

Thomas T. Williams, Ph. D.
Regional Director
U. S. Department of Health and
Human Services - Region IV
Atlanta, Georgia

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PREFACE - U. S. OFFICE OF PERSONNEL MANAGEMENT

It is generally understood that a democracy must have a responsive, responsible civil service. It is also understood that the civil service of the United States is the best in the world. Whether it remains the best will depend on decisions we make and actions we take over the next 10 years or so.

The Federal workforce of the 21st century will be much different than the workforce of the 1980s, but it need not be less competent or less effective. A major portion of the Federal workforce of the early 21st century is already on the payroll and has proven its ability to perform. The remainder of the workforce is in the process of being educated. The ability of the American civil service to provide the kind of service this great nation requires will depend largely on our willingness to accept the challenges described in Civil Service 2000 and in documents like The Southeast's 21st Challenge.

One of these challenges will be to attract and keep not only highly educated engineers and scientists but also highly trained and motivated administrators and support personnel. The economy of the United States is rapidly becoming a service economy. As this nation's largest provider of services, the Federal Government is in direct competition with the private sector for the best and brightest workers.

The Office of Personnel Management is pleased to cooperate with the Departments of Labor, Education, and Health and Human Services in developing approaches to the problems that confront us and solving them together. We invite all Federal agencies, State and local governments, and all citizens to join us in building the Public Service of the 21st century.

John W. Ehlers
Acting Regional Director
Atlanta Region
U.S. Office of Personnel Management
Atlanta, Georgia 30303

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INTRODUCTION...

With the approach of the 21st century, governmental, academic, civic, and business leaders and organizations have begun to identify and plan for demographic, economic, and social trends which are occurring and which will impact on our nation between now and the year 2000. Over the past couple of years, the United States Department of Labor (DOL) has sought to provide leadership to this growing effort by guiding these various interests, as well as the public-at-large, in their planning for potential workforce problems brought about by demographic changes as well as social and economic problems. Through its programs and avenues of partnership with state and local governments and the private sector, DOL has attempted to heighten public awareness of the policy implications of labor force and occupational projections for human resource development and utilization. By institutionalizing processes for public discourse on these trends and their implications for human resource development and utilization and integrating the results of such public debate on planning and program design, DOL has demonstrated how partnerships between the public and private sector can foster positive efforts to address the critical issues facing our nation, region, state, and localities.

DOL's early efforts to focus attention on the evolving demographic, economic, and social trends that are already causing pervasive mismatches between workplace needs and workforce capabilities included the issuance of a research report, ***Workforce 2000: Work and Workers For The 21st Century,***[1] and a Bureau of Labor Statistics publication, ***Projections 2000.***[2] These efforts were further strengthened by joint initiatives with other Federal agencies and professional organizations,[3] and by the interest and concern voiced by others, particularly the private sector, through numerous reports and publications.[4]

While DOL's primary focus has centered on national issues, it has also sought to localize its campaign to develop a competitive workforce. In the Southeast, DOL's initiatives have included the development of a regional focus report, ***Looking To The Year 2000: A View From The Southeast;***[5] a collaborative research study conducted with the National Alliance of Business which resulted in a report entitled ***Atlanta 2000: Its Changing Job Market and The Employment Readiness of Its Workforce;***[6] and the convening of a leadership conference to make regional public and private sector leaders more aware of the potential workforce and workplace mismatches, as well as to provide a forum in which these leaders could plan strategies for state and local action.[7]

TRENDS, CHANGES, and CHALLENGES...

All of these efforts and each of these reports emphasized that our economy and society are beginning to undergo economic and political shock due to changes being brought about by new technology, stiff international competition, changes in consumer tastes, and demographic shifts. On both the national and regional front, these early projections and reports highlight **six major trends which are showing change in the Southeast.**[8]

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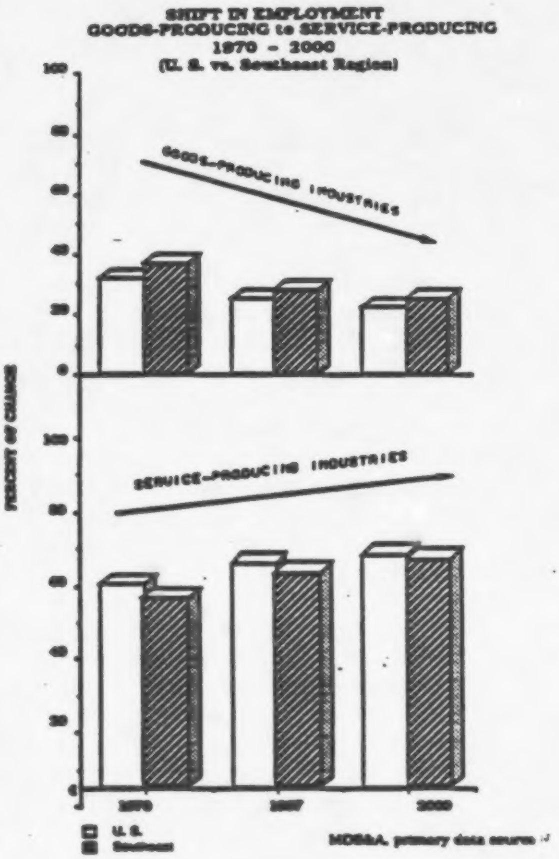
Trend One... ***There will continue to be significant geographic and occupational shifts in employment as the availability of jobs diminishes in goods-producing industries and increases in service-producing industries.***[9]

The demographics are straightforward. Between 1987 and the year 2000 some 21 million new jobs will have been added to the nation's economy. Nine out of every ten of these new jobs will be in service-producing industries. By the year 2000, more than seven out of every ten of the nation's workers will be employed in the service-producing sector.

Like the nation as a whole, the availability of jobs in the Southeast will continue to decline in goods-producing industries and increase in service-producing industries. Furthermore, the migration of workers into the Southeast will continue as more than one out of every five new jobs created in the nation will be in the Southeast. As depicted in Graphic 1, in 1970, thirty-seven percent of those employed in the eight southeastern states worked in the goods-producing sector with sixty-three percent employed in the service-producing sector. By the year 2000, three out of every four workers in the Southeast will be employed in service-producing industries, while less than one in four will work in goods-producing industries.

Graphic 1

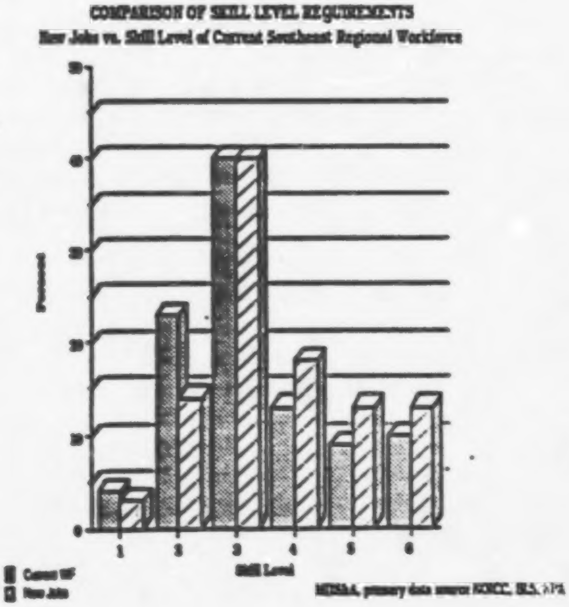

SHIFT IN EMPLOYMENT
GOODS-PRODUCING to SERVICE-PRODUCING
1970 - 2000
(U. S. vs. Southeast Region)

MDSSA, primary data source

Trend Two... ***As the economy adjusts to technological change and the need to meet increased international competition many new and existing jobs will require workers to exercise higher levels of knowledge and skill.***

Over half of the new jobs created nationally, and here in the Southeast, will require some postsecondary education. The number of jobs which will require four or more years of college will increase by forty-five percent. Jobs in professional occupations requiring a college degree will increase by about a third, while technician and service jobs requiring college level education will increase nearly fifty percent. Marketing and sales occupations requiring a college degree will double. By the year 2000, the average job in the Southeast will require almost fourteen years of formal education.[10]

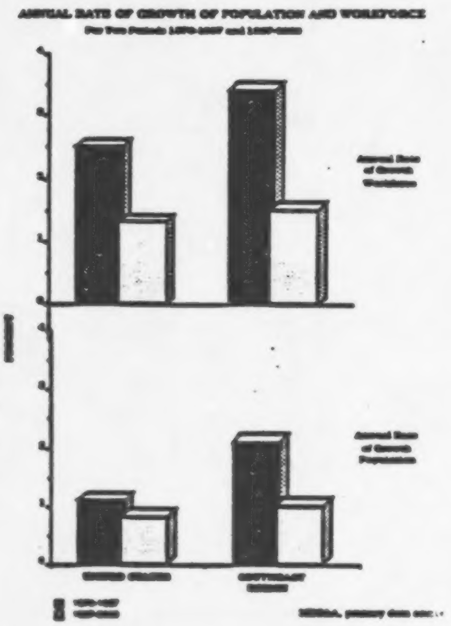
Graphic 2


COMPARISON OF SKILL LEVEL REQUIREMENTS
New Jobs vs. Skill Level of Current Southeast Regional Workforce

MDSSA, primary data source NOICC, BLS, NPA

In terms of skill, the jobs which are evolving and being created are requiring workers to reason, compute, and communicate at higher levels than previously expected. The General Education Development (GED) skill level definitions developed through DOL's research activities[11] can help us understand this shift in skill requirements. As Graphic 2 shows, the average new job in the Southeast will require a GED skill level of three or more. This means that workers hired for the average new job will be expected to reason through a variety of work situations without standard solutions; be able to interpret instructions involving written, oral, and diagrammatic form; perform arithmetic, algebraic, and geometric operations; and read, write, and speak on a variety of subjects of considerable complexity. Table 1, which is found in the Appendix, outlines the reasoning, mathematical, and language skills expected at each of the six DOL GED skill levels.

Graphic 3

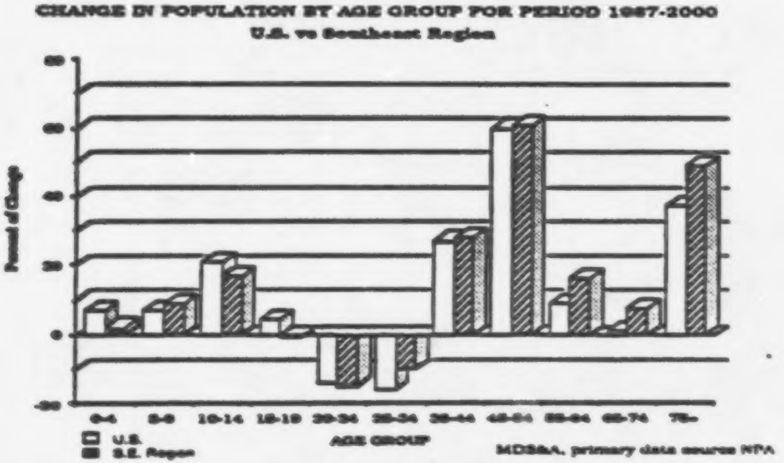


Trend Three... ***The population and its resulting workforce will grow more slowly and the pool of young workers entering the workforce will shrink, while the average age of the population and workforce will rise significantly.***

Between now and the year 2000 the nation's population will grow at an average annual rate of less than one percent while the workforce will expand at an average annual rate of 1.3 percent. In the Southeast both the annual rate of growth for the population and its resulting workforce will be about half that experienced during the period 1970 to 1987. However, even with this decline in growth, almost one-fourth of the nation's population increase will be in the Southeast.

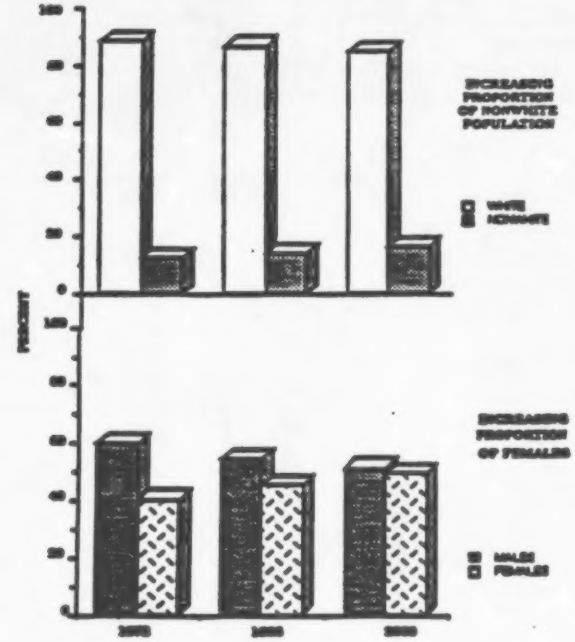
During this same period, that portion of the population which traditionally provides entry level workers to the workforce, age group fifteen to twenty-four, will decline six percent nationally and eight percent in the Southeast. That means the number of young workers entering the region's workforce will decline by more than 550,000. Furthermore, as depicted in Graphic 4, the number of individuals of traditional college

Graphic 4



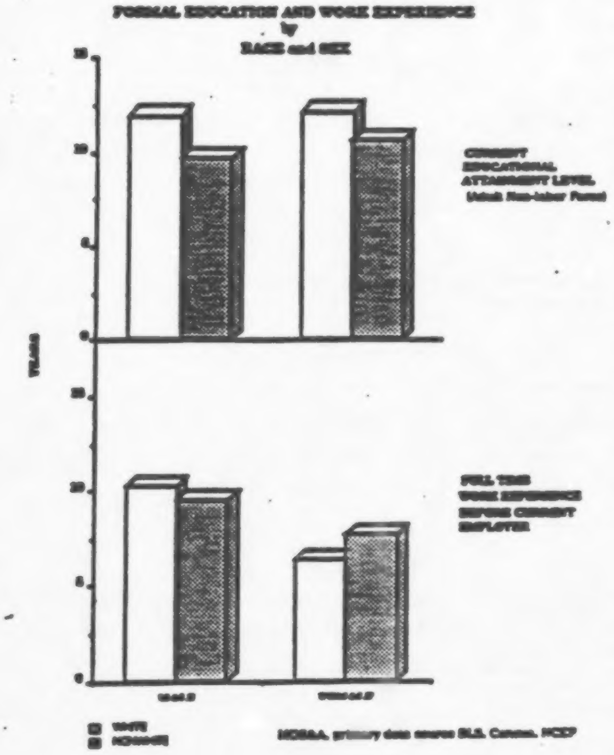
MDS&A, primary data source NPA

Graphic 5



MDSAA, primary data source BLS

Graphic 6



MDSAA, primary data source BLS, Census, NCEP

age, e.g., twenty to twenty-four, will decline fourteen percent nationally and fifteen percent in the Southeast. The number of white college age youth will decline at almost twice the rate for nonwhite youth. By the year 2000 almost one out of every four youth in the Southeast who are of traditional college age will be nonwhite.

By the year 2000 the average age of the population in the Southeast will rise to thirty-seven, while the average age of the workforce will be thirty-nine.

Trend Four... ***The proportion of the workforce and pool of available entrants coming into the workforce that are minority and/or female will increase substantially.***

Nationally, that proportion of the workforce which is female will rise from forty-five percent in 1987 to forty-nine percent by the year 2000; while that proportion which is nonwhite will rise from fourteen percent to sixteen percent. In the Southeast, almost eight out of every ten new entrants into the workforce will be female and/or nonwhite. By the turn of the century fifty percent of the region's workforce will be female and twenty-two percent will be nonwhite.

Trend Five... ***Most of the growth that will occur in the workforce will come from groups in the population that have traditionally been underutilized and/or are not ready to enter the job market because of limited work experience and/or formal education.***

Both nationally and here in the Southeast the workforce of the year 2000 will look very different from that of today. People under the age of twenty-five, as well as those age fifty-five and older will make up a smaller share. Women, Blacks, Asians, Hispanics, and other minorities which have traditionally been underutilized and/or have limited work experience and/or formal education will make up a larger share.

Historically, the labor force participation rate for men has been higher than for females, and the rate for whites higher than for nonwhites.[12] Generally, age correlates closely with years of work experience.[13] Currently the average age of the white male workforce in the Southeast is 37, compared to 38 for white females, 33 for nonwhite males, and 34 for nonwhite females.

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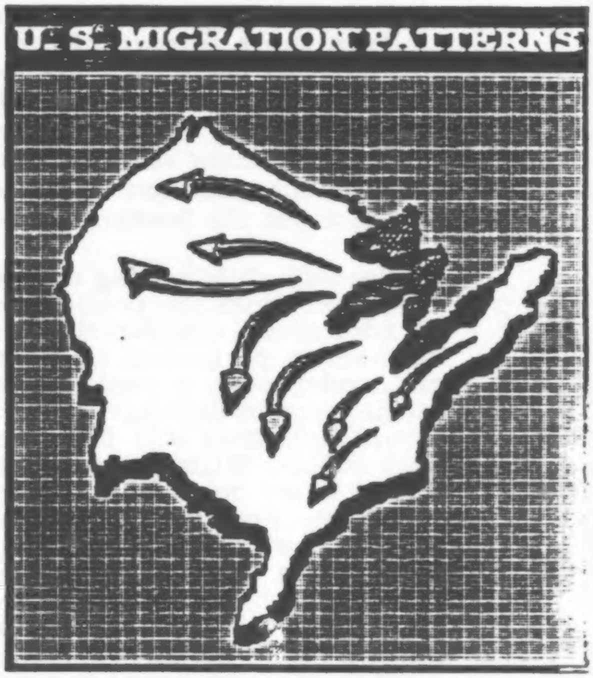
In terms of the amount of full-time work experience individuals have gained before coming to work for their current employer, the average adult white male has 10.2 years full-time work experience, compared to 9.5 years for the adult nonwhite male, 6.4 years for the white female, and 7.7 years for the nonwhite female.

The educational attainment level for the average adult white male in the Southeast is 12.6 years of formal education, compared to 12.2 years for the nonwhite male, 12.5 years for the white female, and 12.2 years for the nonwhite female. Sixty percent of the white population in the Southeast has graduated from high school while only forty-five percent of the nonwhite population has obtained that level of formal education. Likewise, fourteen percent of the white population has graduated from college compared to only nine percent of the nonwhite population.

Graphic 7

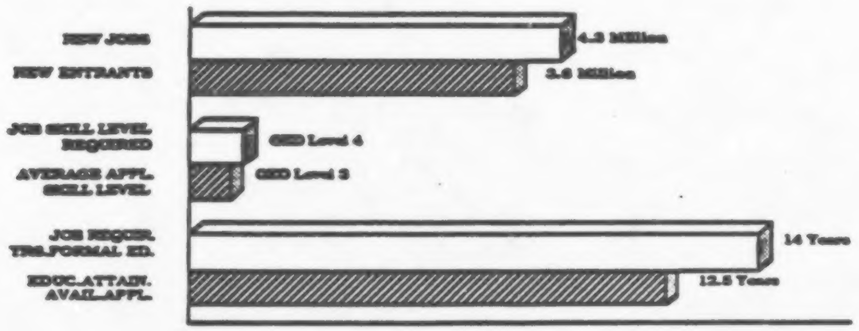


Trend Six... ***The nation's population shift from the "Frost Belt States" of the North and Midwest to the "Sun Belt States" of the South and West will continue.***

By the year 2000, two-thirds of the people in the continental United States will live in the southern states. Furthermore, eighteen out of every one hundred will live in the eight southeastern states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

These six trends will continue to create a mismatch between workplace needs and workforce capabilities. In the Southeast some 4.3 million new jobs will be added to the economy between now and the turn of the century but only 3.6 million new entrants will be added to the working age population. Based on current average workforce participation rates, this means about one-fourth of the new jobs may go unfilled. Furthermore, the work to be performed in the average new job will require the worker

Graphic 8


SOUTHEAST REGIONAL WORKPLACE - WORKFORCE MISMATCH

MDS&A, primary data source BLS, NPA, NOICC, SE Reg.Ed.Bd.

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to use skills normally obtained from at least fourteen years of formal education while the average educational attainment level for adults in the region is12.5 years. In terms of skill level, the average job applicant has a GED skill level of three while the average new job will require the worker to function at or above GED skill level four.

When the effect of social and economic problems such as adolescent childbearing, out-of-wedlock births, economic disenfranchisement, homelessness, drug abuse, and adult illiteracy are considered, the mismatch between the number of jobs available and the number of qualified adults available to fill them greatly increases.

These issues, once defined only as "social problems," now must be dealt with out of economic necessity. The annual cost of adolescent childbearing, homelessness, adult illiteracy, and drug abuse to the region's economy has been estimated to exceed $80 billion. **Even more important, as the labor market tightens and the availability of qualified workers becomes more limited, employers, both in the public sector and the private sector, will not be able to afford to discriminate, put workers at health and safety risks, ignore training needs and workers' obligations to family, or fail to focus on human resource management and development. This focus on human resource management and development must also include attention to those factors which inhibit entrance into the workforce. In the Southeast for example...**

> **Adolescent childbearing and parenting** represent a renewing loss of human resources from the pool of potentially employable people. The overall cost of adolescent childbearing is high. The most recent data shows that forty-seven percent of all births in the United States to girls age seventeen and under were to adolescents living in the South and over 5,000 of these births were to girls age ten to fourteen. Furthermore, eighty percent of all teenage mothers and forty percent of all teenage fathers fail to complete high school. Slightly more than one in four females who drop out of high school do so because they were married, planned to get married, or were pregnant. Females who drop out of high school are one-third less likely to enter the workforce than females who graduate. This initial loss of the teen parent who drops out of school and becomes another educationally limited person is compounded by the future loss of the teen's child or children since the most common factor among high school dropouts is that their parents were usually high school dropouts. Regionally, the public cost of adolescent childbearing is estimated to be more than $2 billion annually.[14]
>
> **The high school dropout rate** in the Southeast continues to be one of the highest of any region of the country. Almost thirty-six percent of students entering high school in the ninth grade fail to graduate with their peers at the end of the twelfth grade.[15] An estimated 250,000 students here in the Southeast drop out of school annually. That means between now and the year 2000 some 2.8 million dropouts could be added to the region's educationally limited population. Furthermore, out of every seven students who drop out of high school, one is White, two are Black, and four are Hispanic. Of those who drop out less than half will return to complete their high school education. The economic cost to the individual dropout is high since the average annual income for a person with less than a high school education is thirty-seven percent less than for a high school graduate. The overall lifetime cost of each dropout to the region's economy, in terms of lost tax revenue, welfare and unemployment expenditures, crime prevention funds, and lost productivity to employers is estimated at $60,000. This means an economic loss to the region's economy of some $84 billion between now and the turn of the century.

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The educationally limited, 2.8 million dropouts, will be added to the estimated 12.1 million people currently living in the Southeast who are *functionally illiterate*.[16] Of this total, six out of ten (some 7.3 million) are not in the workforce and are estimated to be costing the region $31 billion annually in lost business productivity, unrealized tax revenue, welfare, crime, and related social problems. Some 1.2 million are currently in the workforce but unemployed and costing the unemployment insurance systems in the eight southeastern states some $1.4 billion annually. Even more important, an estimated 3.6 million educationally limited adults are currently in the region's workforce and employed. These educationally limited adults cost employers as much as $24.8 billion annually in lost time, substandard performance, and various other work related problems. Conservatively, adult illiteracy problems are already costing the southeastern regional economy $57.2 billion annually or $4,727 per adult illiterate. Between now and the year 2000 that economic loss will grow as will the impact the loss of these human resources has on the pool of available qualified workers.[17]

Economic disenfranchisement, or poverty, is basically defined as "the state of one who lacks a usual or socially acceptable amount of money or material possessions."[18] From an economic viewpoint the poverty level is currently defined as annual income of $5,980 per year for a family of one and $10,060 per year for a family of three. It is therefore estimated that between twelve and twenty percent of the region's population lives in poverty. Even more important are the growing ranks of the region's *working poor*, especially young families headed by persons under the age of twenty-five. For example, married couples, headed by a person age twenty-four or younger, lost eleven percent of their real incomes from 1973 to 1986 while female-headed families with no spouse present lost 32.4 percent.[19] White families lost 19.4 percent; Hispanic families 18.5 percent; and young Black families 46.7 percent. *Overall, the per capita income in the region in 1987 was $10,954, slightly above the annual minimum wage and the poverty level for a family of three.* The cost of poverty to the economy is enormous. Among the ranks of the working poor, an even larger share of what they earn goes to keep a roof over their heads. Often their work provides little in the way of benefits, and issues relating to family such as adequate childcare and education add to their woes.

A growing number of Homeless individuals, as well as whole families, are slipping into poverty and unable to keep a roof over their heads. On the national front, estimates of the number of homeless people range from 350,000 to 5 million.[20] The extreme deviation of such estimates affirms the fact that no one really knows the severity of this recently growing phenomenon of economic disenfranchisement. Furthermore, while the number of homeless persons within the Southeast ranges from 86,000 to 865,000, attempts to determine the actual number within a region, state, or even locality are thwarted by limited knowledge of the problem coupled with the lack of a standard definition of what constitutes homelessness. For many, the old view that the homeless are simply derelicts or shiftless drunks and/or mentally incompetents still lives. This historic picture of the homeless is giving way to the reality that the number of homeless persons increases by an estimated twenty-five percent each year, and that the fastest growing group among the homeless is families with children. Even more frightening is the fact that increasing numbers of homeless persons are working but unable to find affordable housing. Also, while the impact of homelessness is felt most in urban areas, an increasing number of homeless are to be found in suburban and rural communities. In the Southeast, all eight state governors have acknowledged that the homeless are a growing economic and social concern which must be faced. One estimate places the costs of homelessness in terms of the provision of social services and criminal justice functions, as well as lost tax revenue and consumer buying power in excess of $2 billion annually in the Southeast.[21]

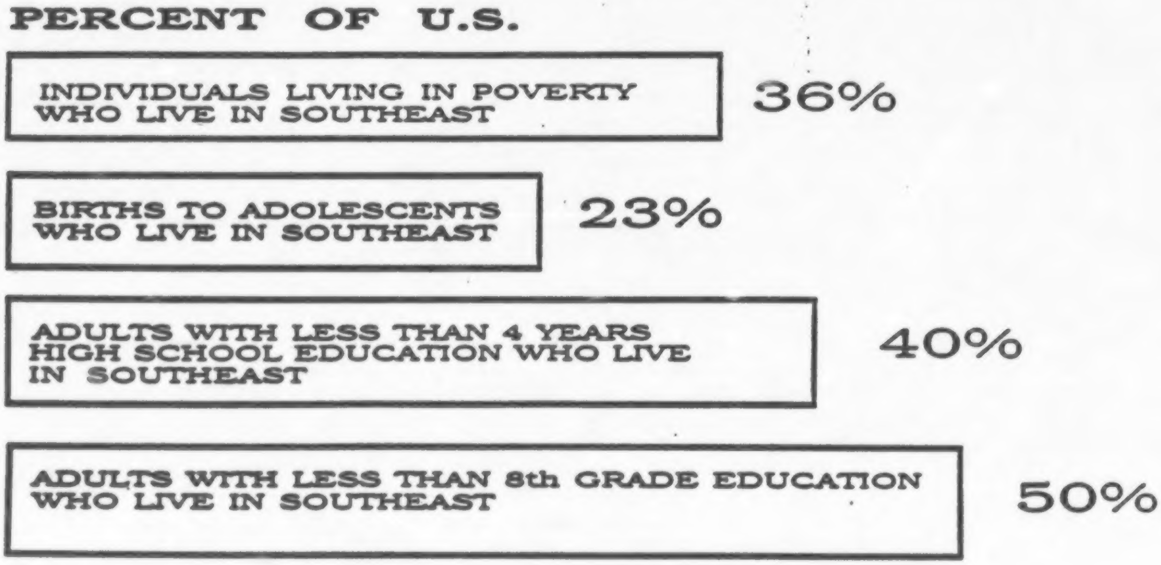
Drug abuse... The effect of drug abuse by members of the adult working age population on employers in the Southeast, as well as on the regional community-at-large, is a growing concern. Current estimates indicate as much as sixteen percent of the population age eighteen to twenty-five use some form of drugs regularly with two percent being hard core abusers.[22] With the exception of stimulants, males tend to use drugs more often than females (15% of males regularly use drugs vs 12% of females); whites tend to use drugs more often than nonwhites (35% vs 28%); those unemployed or not in the workforce tend to regularly use drugs more than those employed (40% vs 37%); and with the exception of alcohol, those with less than a high school education tend to use drugs more than those with high school or more education (26% vs 21%). For the employer, drug abuse can be very costly. In addition to reducing the number of available adults within the pool of potential workers from which employers can recruit, it is estimated that thirty-seven percent of full-time employees and twenty-nine percent of part-time employees use marijuana regularly, eight percent of full-time and four percent of part-time employees use cocaine regularly, and seventy-six percent of full-time and sixty-seven percent of part-time employees use alcohol regularly. The typical drug abusing employee is...

- late to work three times more often than the nonabusing employee,
- has two and a half times as many long term absences (e.g., absences that amount to eight days or more),
- uses three times the amount of sick benefits,
- is five times more likely to file a workers' compensation claim, and
- has almost four times the number of work related accidents.

With an estimated one-third of all employees regularly using drugs, the likelihood of use during working hours increases; so does the chance of accidents, injuries to other people, poor worker performance, lost time, theft, and other liabilities. Based on national estimates,[23] drug and alcohol abuse costs southeastern employers an average of $1,200 per employee per year or $8.8 billion annually. In terms of the loss of potential employees, drug abuse further removes an estimated forty percent of those adults age 18 to 25 who are not in the workforce from the pool of possibly employable persons. Furthermore, the fact that four out of ten high school seniors use drugs other than marijuana and that one in twenty high school seniors use drugs on a daily basis causes serious concern for the quality of new entrants into the workforce. With the growing number of new entrants into the working age population having used drugs coupled with the fact that many employers test for drug use before hiring,[24] drug abuse may further reduce the pool of potential employees available to regional employers by at least thirty percent.

Graphic 9

THE SOUTHEAST...HOME TO THE MAJORITY OF AMERICA'S POOR, EDUCATIONALLY LIMITED ADULTS, and ADOLESCENT PARENTS



As the previous sections point out, the economic cost of these social problems within Southeast is high and the additional loss of potential workers is serious. However, extent of the problem becomes more real when the information shown in Graphic 9 realized. **The Southeast has more people living in poverty, more births to adolescen and more educationally limited adults than any other region of the country.**

THE MISMATCH...The jobs will be here, but what about the workers?

In terms of total population and workforce, by the year 2000 it is projected that there will be 39 million people age fifteen and over living in the Southeast. Of these, an estimated 25 million will be in the workforce, an increase of about 3.6 million new entrants. At the same time there will be some 26.5 million jobs available, of which some 4.3 million will be new jobs. This means there will be about 1.5 million more jobs available than the number of people age fifteen and over in the workforce, and 700,000 more new jobs than the number of new entrants into the working age population. This projected mismatch will be exacerbated by social problems, such as those discussed previously, which if not addressed could further reduce the number of job-ready and qualified adults available in the region's recruitment pool by as much as forty percent.

For Many Southeast Employers The Year 2000 Is Already Here....

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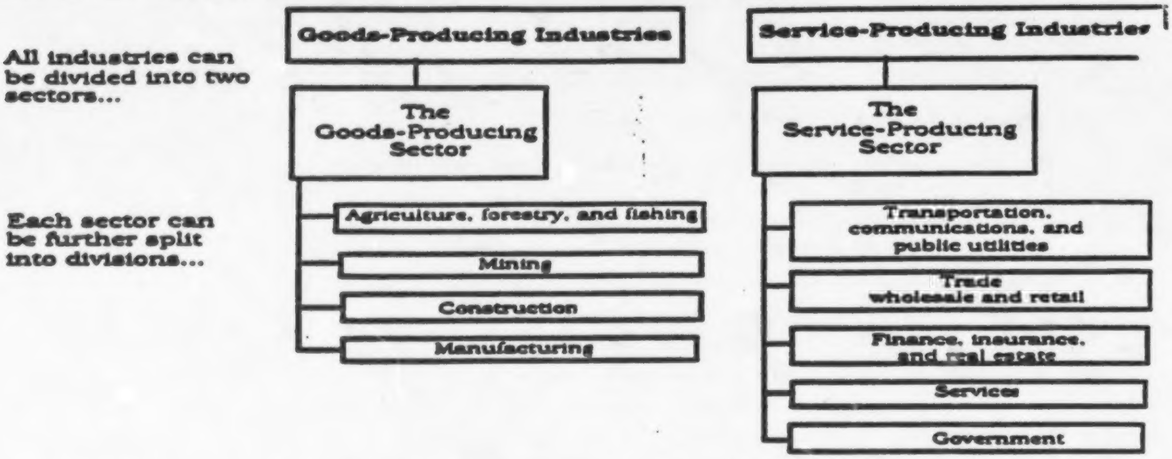
Graphic 10

DEPARTMENT OF LABOR INDUSTRIAL CLASSIFICATION SCHEME
Goods and services are produced in industries classified by sector, division, and group.


All industries can be divided into two sectors...
Goods-Producing Industries
Service-Producing Industries
The Goods-Producing Sector
The Service-Producing Sector
Each sector can be further split into divisions...
Agriculture, forestry, and fishing
Mining
Construction
Manufacturing
Transportation, communications, and public utilities
Trade wholesale and retail
Finance, insurance, and real estate
Services
Government

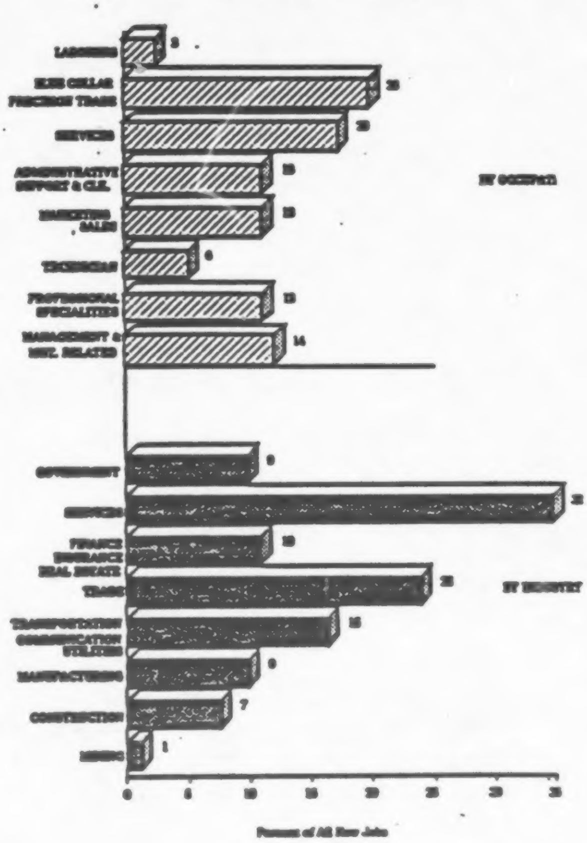
Each division has several groups of industries, and each group of industries has many individual industries.

In The Private Sector....

Most of the reports and publications dealing with "*Workforce 2000*" issues have presented their messages in terms of *the private sector work place* and the U. S. Department of Labor's industrial classification scheme as depicted in Graphic 10. Based on this industrial breakdown, ninety-one percent of all new jobs in the Southeast will be with private sector employers while nine percent of the region's new jobs will be in government and the *public sector*.[25] Table 2, located in the Appendix, provides further information on where the jobs being created in the Southeast economy will be found.

Almost nine out of every ten of these new *private sector* jobs will be in service-producing industries. Even more important, the average new job will require a GED skill level of 3.5 and fourteen years of formal education. Almost one in every two new jobs will be in occupational fields which require a skill level of four or more. Furthermore, twenty-one percent, or about 900,000 of these new jobs, will require one to three years of postsecondary education (i.e.,

Graphic 11



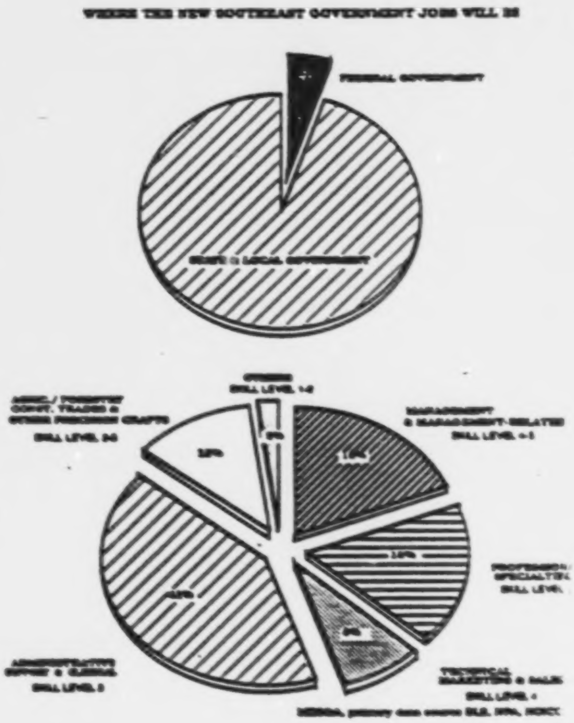
MDSSA, primary data source BLS.

education normally received in two-year colleges, community colleges, vocational schools, etc.), and another twenty-seven percent or 1.2 million new jobs will require four or more years of higher education.

In addition, current projections indicate that between now and the turn of the century, private sector employers may need to fill between 20 and 30 million existing jobs as current employees retire, resign, or are separated from employment. Some twenty-one percent of these *replacement* jobs will require entrants to have one to three years of postsecondary education, with another twenty-two percent requiring four or more years of higher education.

On the demand side therefore, each year between now and the year 2000, regional private sector employers will need to fill some 2.7 million jobs (an estimated 320,000 new jobs and 2.3 million replacement jobs). About 573,000 of these annual openings will require one to three years of higher education and another 597,000 will require four or more years of postsecondary education. Table 3, found in the Appendix, shows the ten fastest growing occupations in the Southeast.

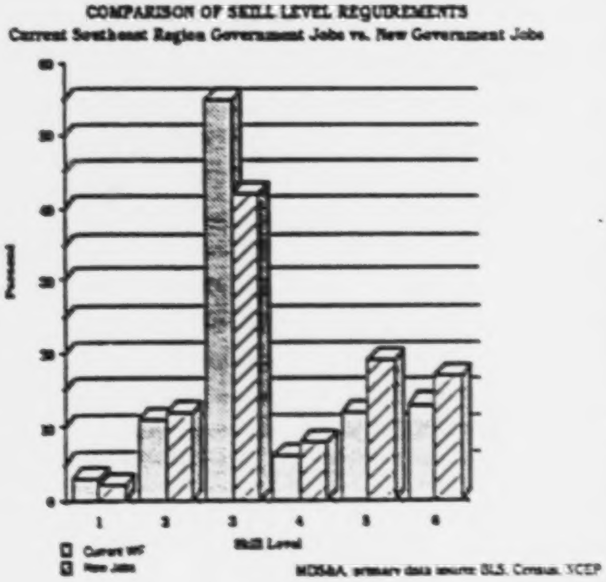
Graphic 12



In The Public Sector....

Of the 4.3 million new jobs to be added to the southeastern's economy, some 409,000 or about nine out of every one-hundred will be in government. As Graphic 12 indicates, the majority of these new government jobs will be at the state and local level. However, a significant number will also be with Federal government agencies located throughout the Southeast.

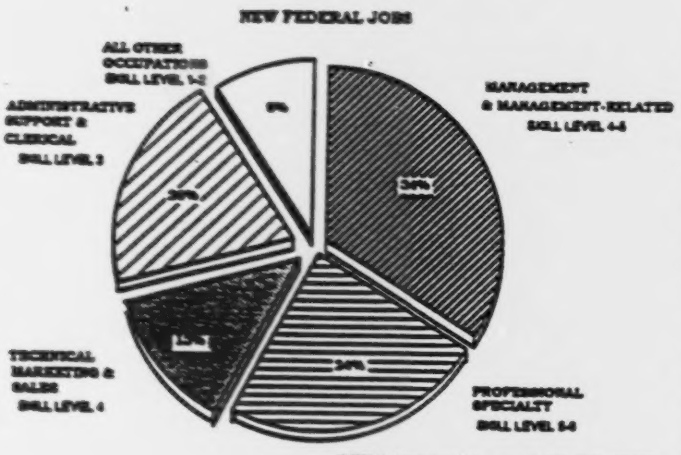
Graphic 13



Occupationally, forty-five percent of these new *public sector* jobs will be in managerial, professional, and technical fields which will require entrants to have a GED skill level of four or more and an average of fourteen years of formal education. However, the occupational mix and actual skill requirements of these new jobs will differ with the level of government operation involved. Overall though, as depicted in Graphic 13, the skill level required to perform the work of these new government jobs will be significantly greater than the skill level required by current government jobs.

In addition to the approximately 400,000 new jobs that public sector employers will need to fill, over seven million replacement jobs will become available as current employees retire, relocate, and are separated. Almost four out of every ten of these replacement jobs will require new entrants to have postsecondary education. Annually, public employers will need an average of 1.5 million workers to fill jobs which require the knowledge, skill, and ability typically acquired through one to three years of postsecondary education and 1.3 million new workers with four or more years of higher education. **Where will these new and replacement public sector jobs be?**

Graphic 14



MDSBA, primary data source BLS, NPA, NOICC

With Federal Government Employers....

While the total number of Federal employees nationally is unlikely to grow significantly, a growing share of Federal employment is concentrated in the Southeast.[26] Current estimates indicate that between five percent (20,000) and ten percent (40,000 plus) of the region's new government jobs will be in Federal civilian employment (e.g., within Federal government agencies and Federal enterprises).

Between now and the 21st century Federal employment in the Southeast is projected to continue to grow in the managerial, professional, and technical categories and to decline in clerical and blue collar fields. Almost seventy percent of all new jobs will be in managerial, management-related, professional, and technical occupations. For example, some 4,000 accountants; 1,000 personnel and labor relations specialists; 2,000 management analysts; 3,000 engineers; 5,000 computer specialists; and 800 social scientists will be needed to fill Federal government jobs in the Southeast. On average these new Federal jobs will require entrants to have a skill level of 4.5, with six out of every ten new jobs requiring a GED skill level of five to six. Only about one third of the new Federal jobs will be in occupational fields requiring skills defined at GED level three or lower. Table 3 in the Appendix lists the ten fastest growing jobs in the Federal government in the Southeast.

With State Government Employers....

Between twenty-five and thirty-five percent of all new public sector jobs created in the region's economy between now and the year 2000 will be added to the ranks of the eight southeastern state governments. These new jobs will require entrants to have an average GED skill level of 4.2, and almost one out of every two new jobs will be in occupations which require a skill level of five to six.

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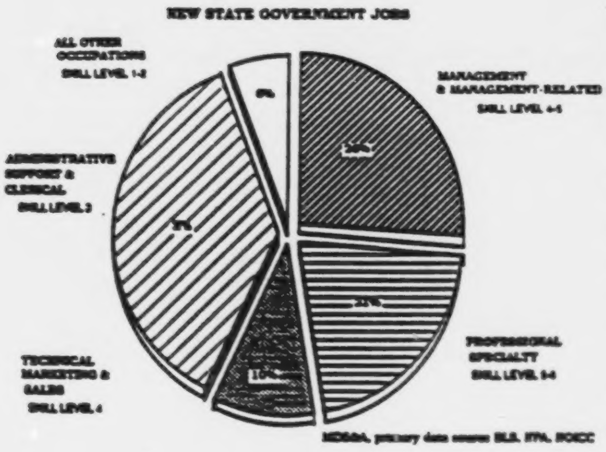
Graphic 15

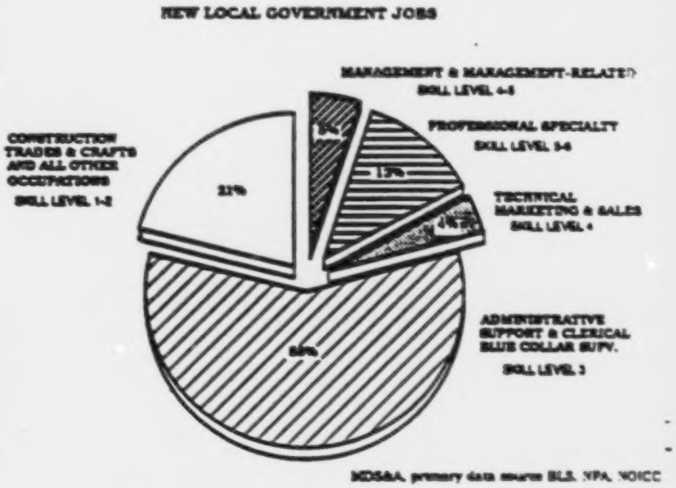


MDSAA, primary data source BLS, NPA, NOICC

Like the region's Federal employers, a majority of the new jobs (57%) state government employers will need to fill will be in the managerial, professional, and technical occupational fields. However, a large share of the new state government jobs will be in administrative support and clerical occupations (37% of new state jobs vs. 20% of new Federal jobs). Some twenty percent of these new state government jobs will require entrants to have one to three years of postsecondary education and another twenty-nine percent will require four or more years of higher education. While state employers will be seeking to fill management and management-related jobs such as personnel and labor relations specialists and management analysts, as well as professional specialties like economists and psychologists, they will also be seeking health diagnostic and treatment professionals and social service technicians. Table 3 in the Appendix lists the ten fastest growing state government jobs in the Southeast.

Finally, while regional Federal employers will experience some turnover and h e thousands of replacement jobs to be filled each year between now and the year 2000 a majority of the some seven million Southeast government jobs which will need to e filled through replacement will be at the state and local level. Like the new jobs being created, the skill level of these replacement openings will continue to rise as old jobs are enhanced through the impact of technology. Over twenty percent of these restructured jobs will require new entrants to have one to three years of postsecondary education and another eighteen percent will require four or more years of higher education.

Graphic 16



MDSAA, primary data source BLS, NPA, NOICC

With Local Governments Employers...

Between 200,000 and 300,000 of the new public sector jobs to be added to the region's economy between now and the year 2000 will be in local government organizations. The overall occupational mix and resulting average skill level of these new local government jobs will differ significantly from new Federal and state level jobs.

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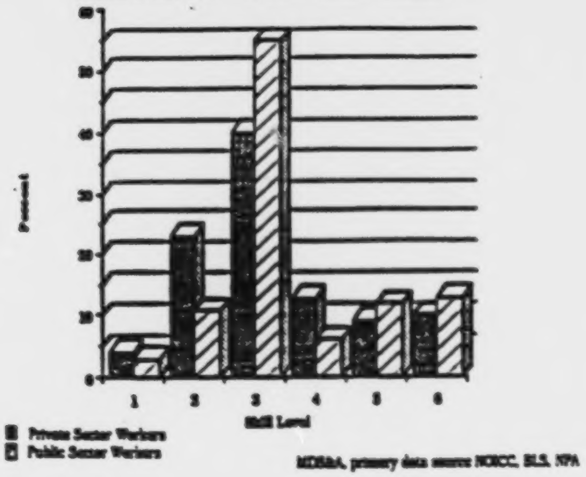
Graphic 17

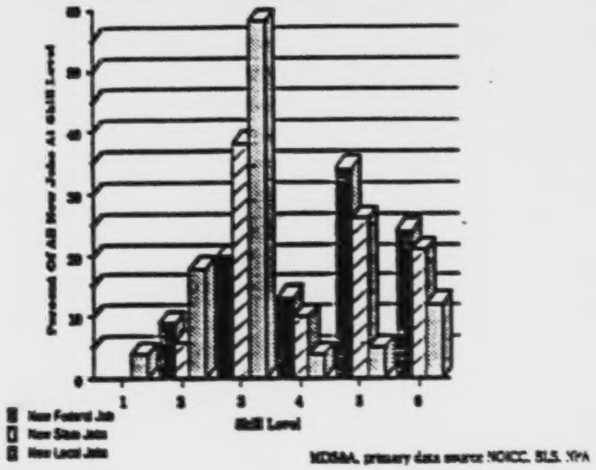
SKILL LEVEL OF CURRENT SOUTHEAST WORKFORCE
Private Sector Workers vs. Public Sector Workers



MDSBA, primary data source NOICC, BLS, NPA

Graphic 18

COMPARISON OF SKILL LEVEL REQUIREMENTS
New Southeast Government Jobs
Federal Government vs. State Government vs. Local Government



MDSBA, primary data source NOICC, BLS, NPA

As can be seen in Graphic 16, the majority of new local government jobs (79%) will be in administrative support, clerical, blue collar supervisory, services, trade and craft, and laboring occupational fields. Only five percent will be in management and management-related fields and twelve percent in professional specialties. Still, eight out of every ten new local government jobs will require a GED skill level of three or more.

While only seventeen percent of local government jobs will be in managemen management-related, and professional occupational fields, local government emplo will be seeking management analysts, social workers, social service technicians, lawy dietitians, and nutritionists to fill new and/or vacant positions. In addition, more th one out of every three new jobs will be in service occupations, including the protective services. Table 3 in the Appendix lists the ten fastest growing local government jobs.

Besides the large number of new jobs which will be available in local governments, over 1.7 million current jobs will become vacant each year as employees retire, relocate, or are separated. Some eighteen percent of these replacement jobs will require four or more years of postsecondary education while almost one out of every two new and replacement jobs will require one to three years of higher education.

Graphic 17 shows that public sector jobs on average require entrants to have and utilize skill levels slightly higher than those required in the private sector. Federal and state government jobs on average require higher skill levels than those at the local government level or in the private sector. Federal government jobs require a mean skill level of 4.5 while state government jobs require a mean skill level of 4.2, private sector jobs require a mean skill level of 3.5, and local government jobs a mean skill level of 3.0. Graphic 18 shows the percent of new Federal, state, and local government jobs by mean GED skill level.

Today's public and private sector work environment is global in scope, constantly changing with the advances of technology, and requires workers to have and utilize higher levels of cognitive skills. In addition all workers are being asked to be more flexible, participatory, and productive. With these demands coming from the workplace, public and private sector employers are finding it more and more difficult to find a hold qualified workers.

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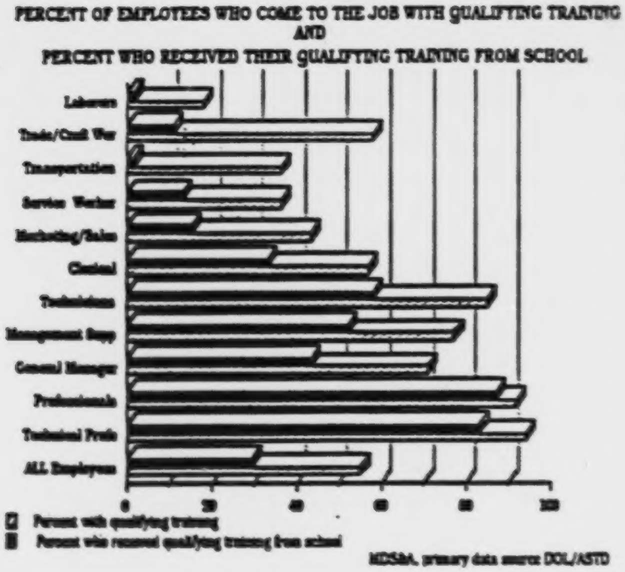
Graphic 19



PERCENT OF EMPLOYEES WHO COME TO THE JOB WITH QUALIFYING TRAINING AND PERCENT WHO RECEIVED THEIR QUALIFYING TRAINING FROM SCHOOL

▨ Percent with qualifying training
■ Percent who received qualifying training from school

HDSBA, primary data source DOL/ASTD

The Supply Side...

Between now and the turn of the century, less than 3.6 million new entrants will be added into the region's working age population. Of these, eight out of every ten will be females, minorities, and/or immigrants. The qualifications of many of these new entrants, however, may not match the requirements of the new jobs being created. A current joint research project of DOL and the American Society for Training and Development (ASTD)[27] has found that only fifty-five percent of all employees come to the job with sufficient qualifying education and/or training. Even more startling is the fact that of those with sufficient qualifications, only twenty-nine percent received their qualifying training from schools. Graphic 19 shows the percentage of employees who come to the job with sufficient qualifying education and/or training by broad occupational category. It is clear that many possible entrants into the workforce do not have sufficient skills or experience to qualify for the new jobs being created. While eighty-five to ninety percent of professionals come to the job with sufficient qualifying training, less than sixty percent of clerical, marketing and sales, service, and transportation workers and laborers come to the job with sufficient qualifying training (see Table 4 in the Appendix for further information on qualifying and upgrading training). For example, among those white male adults not currently in the workforce the mean educational attainment level is 11.9 years, 9.7 years for nonwhite males, 11.2 years for white females, and 10.7 years for nonwhite females. In addition, the traditional labor force participation rate for individuals with low educational attainment levels is itself low, only thirty-three to fifty-eight percent of these educationally limited adults ever enter the workforce.

Based on current data,[28] about four out of every ten new entrants to the workforce will be a high school graduate, two will have one to three years of postsecondary education, and two will have four or more years of higher education. However, more and more students graduating from our high schools have reading, math, and reasoning levels below that needed to perform satisfactorily on the job. The average job today requires skills at about the twelfth grade level; yet, only five to seven percent of our high school graduates can...Synthesize and learn from specialized reading materials, solve multi-step math problems and use algebra, and infer relationships and draw conclusions using detailed scientific knowledge.[29]

Furthermore, an estimated thirty percent of freshmen entering regional institutions of higher education require remedial assistance.[30] It doesn't matter if the new freshman is coming into a two-year or a four-year institution. Both types of postsecondary institutions report the same problem. Even more disturbing is the fact that thirty percent of the region's postsecondary institutions report that at least thirty percent of their total enrollments participate in some remedial instruction. For many employers, therefore today's college graduate still lacks sufficient knowledge, skill, and ability to perform in today's work environment. One study[31] found that...

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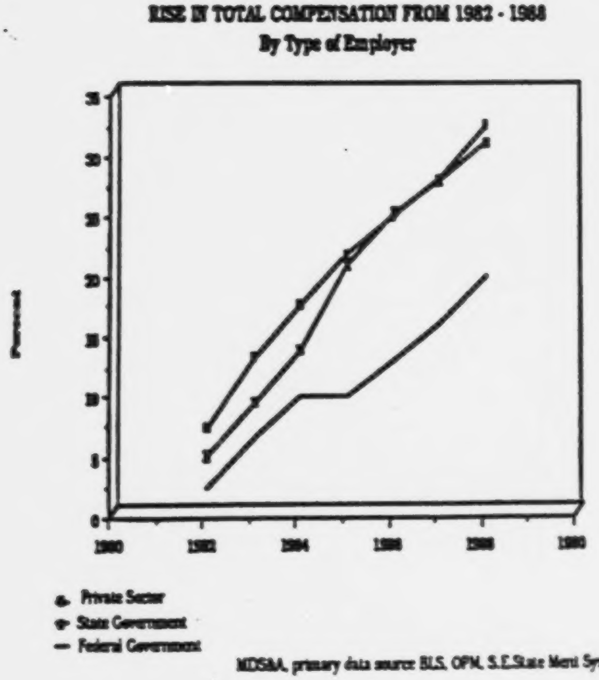
- between forty and sixty percent of those with two or four year college degrees could not identify appropriate information in a lengthy newspaper column or generate an unfamiliar theme from a short poem.
- between sixty and eighty percent could not orally interpret the distinctions between two types of employee benefits.
- between forty and sixty percent could not use a bus schedule to select an appropriate bus for given departure and arrival times.
- eighty percent could not determine the amount of interest charges from a loan ad, and
- between forty and sixty percent could not determine the correct change using a simple restaurant menu.

Employers, public and private, are being faced with the costly realization that the *basic skills gap* between their job needs and the qualifications of entry level workers available is widening, not only with regard to the basic skills of reading, writing, mathematics, and communications, but also in the *new basics* of *problem-solving, team work, initiative, reasoning, and adaptability.*[32]

The number of people entering the Southeast's working age population and its result workforce is declining. At the same time, a large proportion of those who are ente the workforce come from groups in the general population which have been tradition underutilized and/or have limited formal education and work experience. Therefore, pool of qualified workers available to fill the region's new cognitively oriented job beginning to shrink.

Graphic 20



MDSAA, primary data source BLS, OPM, S.E.State Merit Systems

Labor Shortages and Wage Inflation Begin...

As a result of the mismatch betwee workplace needs and workforce capabilities, labor shortages are beginning to occur and wage inflation has already begun as employers, public and private, try to outbi each other for the limited supply of qualifie workers available. Since 1982 to l compensation for Southeast private sec r employees has risen thirty-two percent[33] and the costs of recruiting and hiring one employee now averages about $3,500, with the costs for many jobs exceeding $7,000.[34]

The most frequent method of recruiting new hires is still the acceptance of walk-in applications,[35] since placing applications directly with the employer is still the most frequently used job search method by job seekers. However, as the number and quality of applicants obtained through this traditional labor exchange method decre

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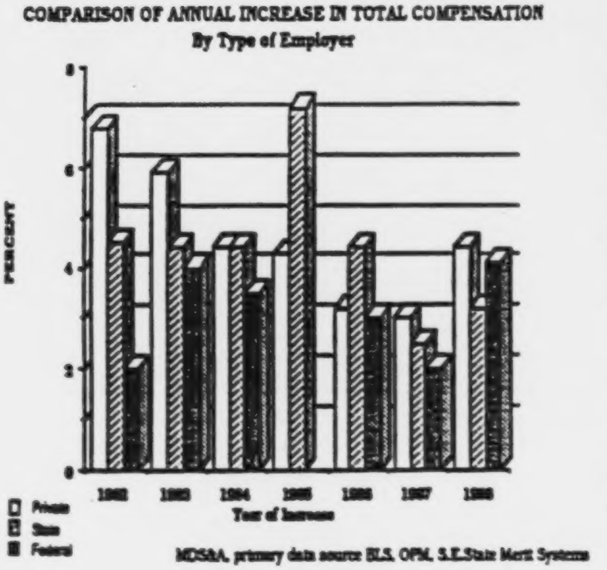
Graphic 21



MDS&A, primary data source BLS, OPM, S.E.State Merit Systems

more and more employers are using alternative recruiting sources. Employers, public and private, are conducting recruiting visits to colleges and other postsecondary institutions, advertising in newspapers and professional publications, participating in job fairs, and using the services of employment agencies. For many employers, however, even these alternative efforts produce unacceptable results, as the number and quality of postsecondary graduates in high-demand occupational fields begin to fall short of the number required. For example, as Table 5 located in the Appendix shows, here in the Southeast it is projected that there will be an average of 167,000 openings in management and management-related jobs requiring postsecondary education, while regional postsecondary schools will graduate only about 71,000 individuals with degrees in business and management-related fields annually. Likewise, some 21,000 engineers will be required annually while only 18,000 will graduate each year. The projected void will exist for technicians and technologists jobs as well. Estimates indicate that 15,000 engineering technicians and 34,000 health technicians will be needed annually, while regional schools will graduate less than one-third these numbers. The number of anticipated graduates listed for each occupational field shown in Table 4, however, does not reflect the number of students who graduate from regional schools that move out of the region. Therefore, the projected mismatch between the number of graduates and the number of job openings may be greater if southeastern employers fail to compete favorably in terms of compensation and other work related factors with employers from other regions.

The upward spiral of wages creates even more of a crisis for public sector employers. While the total compensation of public sector employees, particularly Federal and state workers, has also increased about thirty-one percent since 1982,[36] public employees still earn about twenty-five percent less than their private sector counterparts.[37] This ever increasing deviation between public sector and private sector compensation serves to further limit the ability of public employers to recruit and retain qualified workers. Four recent "*Workforce 2000*" studies, which specifically addressed the public sector employer, all cited compensation deviation as a major deterrent to obtaining sufficient numbers of qualified workers within the public sector employment arena.[38] This lack of competitive compensation further fuels the rising costs of recruitment and hiring for the public employer. Since they seldom can match private sector compensation, public employers often see their jobs remain vacant for extended periods of time as they are forced to seek applicants through ever widening geographical areas of recruitment.

A further complication affecting both public and private sector employers and fueling compensation inflation is turnover. Not only do many new hires jump from one employer to another in search of better pay, but many employers are finding it increasingly difficult to retain experienced workers. While employees who have been "*vested*" in employer pension plans and with other benefits are often reluctant to

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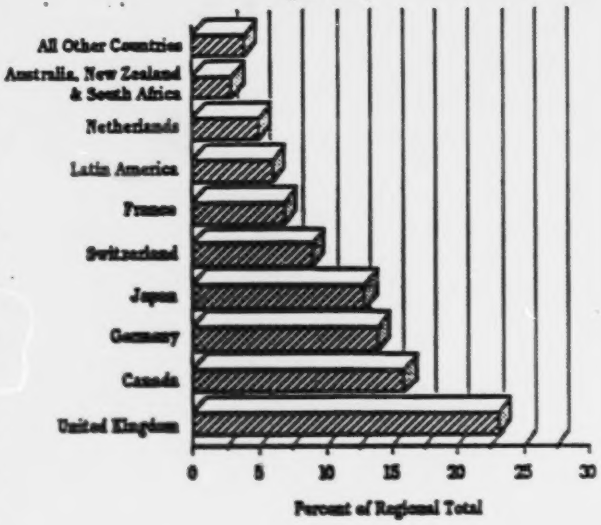
leave and start over with a new employer, many are nevertheless enticed with special incentives. Employers who are experiencing difficulty in finding high-skilled and experienced workers may "find" needed human resources via some third party who seeks out and obtains the services of experienced professional and technical workers on behalf of *anonymous employers*. Such "*theft*" of long-term and experienced workers can be very costly for the losing employer. Here again, the public sector employer is at a competitive disadvantage. First of all, the public sector employer often becomes the employer raided, as trained and experienced highly skilled workers leave public employment for better paying private sector jobs where wages and benefits are not "*capped*." As several reports indicate, this drain of mid-career technicians and professionals further exacerbates the effect aging has on the workforce, particularly the public workforce at the Federal level.[39] While older workers are usually more stable and experienced, they are also more resistant to change and less flexible when it comes to accepting and dealing with new work alternatives and requirements.

Graphic 22

FOREIGN BUSINESS ORERATIONS IN SOUTHEAST REGION

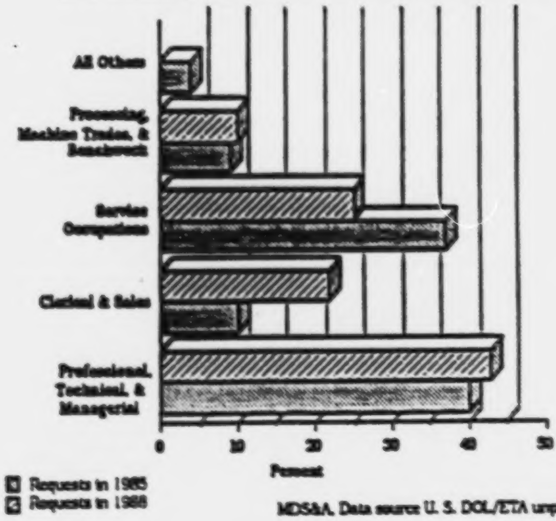
By Country



MDS&A, primary data source U.S.DOC, International Trade Adm.1987

Graphic 23

OCCUPATIONS FOR WHICH ALIEN CERTIFICATIONS WERE REQUESTED IN SOUTHEAST REGIONAL AREA DURING 1985 and 1988



MDS&A. Data source U. S. DOL/ETA unpublished 1989

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In order to locate and encourage available qualified applicants to come to work for them, many private sector employers are offering incentives such as hiring bonuses, transportation assistance, relocation expenses, child care, flexible work schedules, and other benefits. Incentives and benefits which the public sector employer often cannot match because current laws and regulations generally restrict or forbid such recruiting and hiring incentives.

Even with recruitment and hiring incentives, expanded benefits, and higher levels of compensation, many public and private sector employers still find it increasingly difficult to find sufficient numbers of qualified candidates, particularly for critical high-skill jobs. In an effort to find applicants, some employers are recruiting internationally and seeking to fill their critical high-skill jobs with certified alien workers. Recruitment of foreign workers occurs with foreign owned and operated businesses located in the region, and also with other Southeast employers, public and private, who are seeking qualified workers but cannot find them in the American population.

While some requests for alien certifications originate with foreign owned businesses[41] most of them come from other regional employers who are having difficulty recruiting and hiring qualified workers. Since 1985, the total number of requests received by the Southeast Regional Office of the U. S. Department of Labor's Employment and Training Administration for non-agricultural Alien Labor Certifications has increased by almost one-third. As Graphic 23 shows, last year over forty-three percent of these alien certification requests were for professional and technical occupations and twenty-two percent for clerical and sales workers.

The U. S. Department of Commerce estimates that there are over four thousand foreign owned and operated businesses in the Southeast.[40] Table 6, found in the Appendix, shows those countries with business operations in the eight southeastern states. In terms of investment, almost sixteen percent of all foreign investment in the U. S. is in the Southeast. All totalled, there are over $47 billion in foreign investments within the region.

Employers Begin To Look Inward...

Because of the ever-increasing difficulty and cost of hiring new employees recruited from outside the organization, more and more employers, public and private, are being forced to look within their organizations for potential applicants to fill the new high-skill jobs being created.

Many employers have reported changing their recruitment and selection procedures over the past few years. While half of all employers responding to a recent survey by the Bureau of National Affairs[42] reported expanding their recruitment and selection procedures to include college and postsecondary school visits, job fairs, newspaper and other publication advertising, etc., over ninety percent also reported that they *look internally* when trying to fill vacancies.

With an estimated eighty percent of those who will be employed in the year 2000 already in the workforce it makes good sense for employers to seek to better utilize these individuals. Today's employee, therefore, can expect to change jobs seven times and occupations three times during their work-life. However, forty percent of today's workers have educational limitations which prevent them from qualifying for the new high-skilled jobs being created. These skill deficiencies further frustrate employers' recruitment and selection efforts and cost employers through higher turnover, more absenteeism, higher rates of injuries on the job, waste, lost productivity, increased costs for remediation, reduced product quality, and ultimately a loss in competitiveness.

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In an effort to facilitate better utilization and production of employees, and to enhance their potential for promotion, reassignment, and transfer to new jobs, employers have increased their expenditures for training and employee development. In 1988, U. S. employers spent $39.6 billion on formal training.[43] Of those employers providin training, twenty-four percent were providing their employees with remedial basic education...fifty-two percent were providing training in listening skills, forty-one per in writing skills, and nineteen percent in reading skills. Tables 7 through 10 in the Appendix provide detailed information on the types of training provided by American employers, who gets trained, and the industries providing training. Unfortunately, however, even though a considerable amount of money is spent each year on employee development, few employers conduct formal training needs analysis and/or literacy audits to identify those individuals most in need of training. Furthermore, the majority of employer provided training is for management skills and development, supervisory skills, and technical skills updating. Only thirty-five percent of all employees have received any upgrading training, and only eleven percent receive such formal training from their employer. While many employers complain about the skill deficiencies of new hires and other employees, less than one in four middle-to large-sized employers provide remedial basic education for their employees. In the Southeast, only about ten percent of employers provide their employees opportunities for remedial basic education. Employers who are most likely to provide basic skills training include those in manufacturing, business services, health services, educational services, and public administration.

National Attention Shifts to Building A Quality Workforce...

The critical nature of the issues facing our country, coupled with the magnitude and urgency of the challenges they present, prompted the Secretaries of Labor, Education, and Commerce to unite and expand their Departments' individual efforts toward ***Building A Quality Workforce.*** In July, 1988, the three Secretaries convened a conference of representatives from academia, business, education, foundations, government, labor, and the media.[44] These national leaders came together to review the trends affecting the economy, the implications of social issues, and to continue gathering informa from the private and public sector for policy formulation. Among other things, conference and the supporting staff research found that...

- **The economy and the workplace are changing rapidly, and the pace of change is accelerating.**

  It is estimated that ninety percent of all scientific knowledge has been generated in the last thirty years and that this pool of knowledge will double again in the next ten to fifteen years. Furthermore, the product life cycle has collapsed from the ten to fifteen year cycle common earlier in this decade to a current three to five year cycle.

- **Jobs themselves are changing in content and skill requirements, regardless of type or size of employer.**

  Work is being reorganized and production techniques altered. We now see just-in-time and batch production, customized services, autonomous work groups, matrix organizations, and more. Also, jobs are requiring more initiative and greater independence of action by the worker.

- **The "Basic Skills Gap" between employer needs and the qualifications of available entry level workers is widening.**

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- **Employers are almost unanimous in their feeling that the competencies of entry-level workers are deficient; including their basic skills of reading, writing, mathematics, and communications, as well as their ability and skill in problem-solving, team work, initiative, reasoning, and their adaptability.**

- **These skill deficiencies in the workplace are costing American employers monetarily through waste, lost productivity, increased remediation costs, reduced product quality, and an ultimate loss in competitiveness.**

What does all this mean for the Southeast?

Over the past several months considerable effort has been undertaken in both the publi and private sectors to raise the level of awareness of the potential mismatch betwee workplace needs and workforce capabilities. These efforts have also stressed the impac social problems have in further reducing the number of qualified adult workers available t fill the new cognitively oriented jobs being created in the region's economy. Every stat in the Southeast has studied these issues. Each governor has appointed a commission task force, or committee to study, discuss and make recommendations on how best t address problems of adult illiteracy, homelessness, drug abuse, adolescent childbearing etc. In addition, the National Governors' Association, the Southern Growth Policies Board the Commission on the Future of the South, and many other organizations have studie these problems and urged their members to take action, particularly to improve the region's educational systems. As a result, the Southeast leads the way in efforts t improve the quality of education received by its citizens.[45] The eight southeastern state have been among the first to:

- set statewide testing requirements for entry into teacher education programs;
- have programs that require testing teachers for initial certification;
- establish performance-based teacher assessment programs;
- implement career ladder programs for teachers;
- establish loan/scholarship programs to encourage college students to enter teaching;
- establish academies for school principals to help improve school leadership;
- raise high school graduation requirements and administer tests to assure students have acquired basic skills prior to graduation;
- establish programs for advance placement, advance diplomas, and expanded use of kindergartens; and
- increase funding for education.

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Every state in the region has moved toward a "*vision of the year 2000.*" Public and private partnerships, such as those funded through the Job Training Partnership Act, have helped fund pilot programs to address adolescent childbearing, school dropout problems, and adult illiteracy. The region's State Employment Security Agencies have beg mobilize their resources to help employers find and develop the qualified workers ey need. Coalitions have formed to focus employers' attention on human resource management and development, as well as work-family issues. **Much has been accomplished, but as the 1986 report of the Commission on the Future of The South put it...*we are only halfway home and still have a long way to go.***

In order to be competitive in today's labor market, all of us...*workers, employers, educators*...must adjust to the changes occurring and address the challenges facing us. If the Southeast is to continue to prosper into the 21st century it must ***Build a Quality Workforce. Southeastern employers, public and private, must...***

(1) Improve ways of anticipating future workforce needs and communicating these needs to EDUCATORS, PARENTS, STUDENTS, and Others who can help address these needs.

Currently, almost one out of every ten large private sector employers and three out of ten large public sector employers lack formalized procedures for human resource needs forecasting and planning. In addition, even though half of all new jobs created are in organizations that employ fifty or less employees, the majority of small-to medium-sized employers lack formalized human resource forecasting procedures or such human resource planning. In order to properly forecast human resource needs, employers should seek out and utilize labor market information such as that available to them through State Employment Security Agencies' labor market and research units State Occupational Information Coordinating Committees. Once employers have a accurate understanding of their staffing and employee development needs, s information should be shared with employees, educators, and others who can p facilitate cooperative efforts to meet these needs.

(2) Institute procedures and programs to facilitate the entry of more people into the workforce and designed to provide for a quality work life and to accommodate and assist workers in coordinating their family-work connection. This includes the implementation of dependent-care programs, flexible work schedules, and cafeteria benefit plans.

For several years now, human resource management experts have urged employers to develop and utilize procedures and programs designed not only to provide for a quality work life but also to accommodate and assist workers in coordination of their family and work life. Estimates indicate that eighty percent of women in the workforce are of childbearing age and that ninety-three percent of these women will be pregnant during their work years. Furthermore, mothers with preschool children are the fastest growing segment of the workforce. Yet, even though sixty-five percent of employers agree that child care initiatives would be beneficial because they decrease turnover and absenteeism, increase employee commitment, lead to higher productivity, boost morale, give the company an edge in attracting and retaining desirable workers, and are good for public relations, only about two percent of all employers provide direct child care.[46] About in four provide some information and referral services on child care. However, very employers have extended this concept to provide for "*dependent care*," e.g., programs

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designed to address the care needs of children and adults. More and more employers are, however, beginning to utilize alternative work schedules. The term alternative work schedule covers the wide variety of work arrangements that differ from the standard eight-hour day, five-day workweek. By far the most popular alternative work arrangement appears to be the use of permanent part-time schedules. Seventy-five percent of employers employ permanent part-timers; thirty-six percent use some form of flexitime, thirty-one percent allow staggered hours, twenty-five percent a compressed workweek, sixteen percent job sharing, and about one percent job rotation.[47] However, only four percent of public employers have instituted some form of quality of work life programs while twenty percent of key private sector employers have done so.

(3) Increase the number of "job ready" applicants in the recruitment pool through such initiatives as, school/work study programs, internships, cooperative education programs, job readiness training for applicants, and other free or low-cost pre-employment skills training. Institute formal procedures to identify current employees who suffer educational limitations and provide *Basic Skills Training.*

Few employers, public or private, make use of special recruitment and hiring techniques such as school-work study programs, internships, apprenticeship and cooperative education programs. Hardly any provide job readiness and pre-employment skills training designed to increase the pool of qualified applicants from which to recruit. While eighty-one percent provide new employee orientation, only fifty-two percent provide training in listening skills. Forty-one percent provide training to improve writing skills, and nineteen percent provide training to improve reading skills. Furthermore, while both public and private employers spend a considerable amount of money on training and employee development, almost three out of every ten large public employers and four out of ten large private employers fail to conduct employee needs assessments, and only one in four provides any kind of remedial basic education.

While all employers, public and private, must do a better job of anticipating future workforce needs; institute procedures to facilitate entry of more people into the workforce (particularly procedures and programs designed to provide for a quality of work life and accommodate and assist workers in the coordination of family and work life), and increase the number of job ready applicants through the use of innovative recruitment and hiring practices, many voices today argue that if *public employers* are going to be able to successfully compete in the labor market they must also[48]...

- **Take action to rebuild public trust in government;**
- **Simplify hiring procedures and clear away obstacles which prevent public organizations from attracting talented applicants from all parts of society. Continue to emphasize the hiring, training, and promotion of women and minorities;**
- **Develop systems to build student awareness of and educational training for the challenges of government and the public service;**
- **Develop new channels for "spreading the word" about government jobs and the positive records of public servants;**

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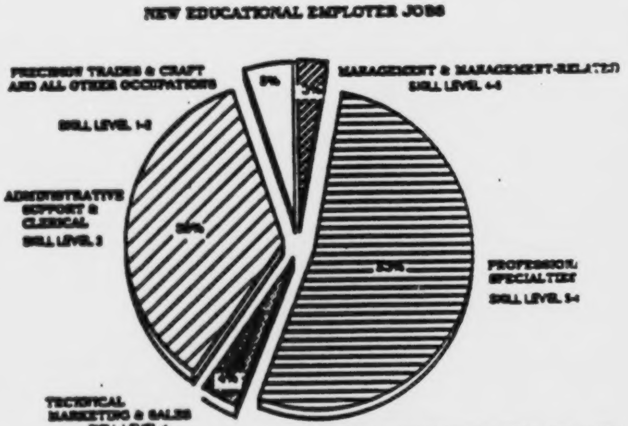
- **Build a pay and benefits system that is both fair and competitive;**
- **Improve government working conditions;**
- **Provide managers the framework within which they can manage programs and personnel in a more flexible manner; and**
- **Build a stronger partnership between government executives, both those who are political appointees and career service government rank and file workers, the educational community, and all others who can help *Build A Quality Public Service.***

The Educational Community...

While education reform efforts have brought undeniable progress, particularly at the presecondary and secondary educational levels, the educational community must...*not only concern itself with the programmatic issues facing it, but also remember that, as an employer, it too faces the problems associated with the workplace-workforce mismatch.*

Graphic 24



MDS&A, primary data source BLS, NPA, NOICC

In the Southeast in the year 2000 about one out of every five service-industry jobs will be in education. In many local areas, the educational community, particularly the public education system, is the largest employer. While at least one out of every two new jobs created in educational institutions between now and the year 2000 will be in a professional specialty area, thirty-nine percent of all new jobs will be in administrative support, clerical, services, trade and craft, and laboring occupational fields. As demographic changes in the region occur, educational employers will find that not only will the types of jobs they must fill change, but also, that the quality of available applicants will change. For example, between now and the year 2000 the region's population for age group zero through fourteen will increase (age group 0-4 up about [illegible]%, group 5-9 up about 10%, and group 10-14 up slightly less than 20%) while age group fifteen through thirty-four will decline (age group 15-19 down about 2%, group 20-24 down 15%, and group 25-34 down about 10%). This age shift in the population will mean an increased need for pre-elementary, elementary, and secondary level teachers, counselors, and librarians as well as teacher aides, bus drivers, cafeteria workers, etc., and a decreasing need for the traditional postsecondary level teacher. Couple this shift with the increased demands from the workplace for workers who not only have higher level skills but who are flexible and able to change with the changing responsibilities of their jobs, and the demands on postsecondary educational institutions change.

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Educational administrators will need to hire some 52,000 teachers, counselors, and librarians annually while the region's colleges and universities are graduating only about 39,000 each year. The void is particularly critical for math, science, and foreign language specialists. In addition, the region's educational systems will need to fill jobs for social scientists, health practitioners, computer specialists, and other professional specialties which will be in high demand by all sector employers. While most of these professional jobs require a skill level of five to six, four out of every ten jobs which will need to be filled will require entrants to have a skill level of three or lower. As an employer, therefore, educational institutions, particularly public organizations such as local school boards, will face the same challenges other employers, public and private, are facing with regard to hiring and retention of qualified workers. This means educational administrators from the pre-elementary level through the postsecondary level must acquaint themselves with the demographic, economic, and social trends affecting all employers and take the proactive measures needed to be competitive.

With regard to programmatic challenges, educators need to continue to concern themselves with educational reform as it relates to the pre-elementary through secondary levels. However, they must also concern themselves even more with how the postsecondary system is or is not meeting the needs of employers and workers for the 21st century.

While the skill levels of secondary and postsecondary graduates seem to be improving educators need to strengthen both curriculum and student performance standards. Specific attention needs to be placed on the seven skill groups identified by the DOL/ASTD research project. Since only fifty-five percent of all employees come to the job with sufficient qualifying training, and only twenty-nine percent of those employees received their qualifying training from the school system, it is apparent that many educators are not translating the needs of employers into what happens in the classroom. Classroom activities must not only address the "*3 R's*" (reading, writing, and computation), but also *teach students how to learn.* Teachers in our secondary and postsecondary educational systems must ensure that students *develop better listening and oral communication skills, learn to think creatively, have the ability to problem-solve, have self-esteem and the ability to set goals, are self-motivating, have good interpersonal and teamwork skills, and learn how to deal in organizations effectively.* More emphasis is needed on developing procedures and programs which allow teachers to gain a better and more timely understanding of the needs of the workplace. For example, secondary and postsecondary educational institutions should establish permanent "forums" which allow the exchange of ideas between employers and teachers. The employer/education connection must move beyond simple "adopt-a-school" and "career day" programs to more in-depth interchange and cooperation.

Postsecondary institutions should look closely at demographic trends and the occupational training needs of the jobs being created in the economy to ensure that educational and degree programs provide sufficient numbers of new entrants to the workforce who have the prerequisite training to meet the needs of employers. By the year 2000 twenty-four percent of the youth here in the Southeast who are of traditional college age will be nonwhite. Yet today only fifteen percent of those enrolled in institutions of higher education are nonwhite. Furthermore, only nine percent of the nonwhite population has graduated from college. Of those minorities who do attend postsecondary institutions, most participate in two year programs. As Table 12 in the Appendix shows, minorities make up about thirty-seven percent of students in two-year programs while they make up only eighteen percent of undergraduate students, ten percent of graduate students, and seven percent of those in first professional degree

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programs. While minorities make up thirty-seven percent of those in two-year programs, only nineteen percent of associate degrees are awarded to Blacks. Blacks are awarded only six percent of bachelor's degrees, five percent of master's degrees, and four percent of doctorial and first professional degrees. If the demographic projection are true and minorities are going to make up a larger share of the new entrants int ne workforce, then more affirmative measures must be taken to ensure that this g receives the education needed to qualify for the high-skill jobs being created in t Southeast.

Not only must the postsecondary educational system be concerned with ensuring that minorities and females have the opportunity to gain postsecondary education, but the system must also ensure that the number of individuals receiving degrees and certificates is adequate to meet the needs of the job market. As Table 5 in the Appendix shows, some 167,000 openings for management and management-related jobs are projected each year from now to the year 2000, yet the region's postsecondary institutions currently award only about 71,000 degrees in educational fields which typically are required to enter these jobs. Similarly, some 21,000 engineering, architecture, and surveyor jobs will open while only 18,000 degrees in the prerequisite fields are awarded annually; some 51,000 teachers, librarians and counselors will be needed each year while only 39,000 degrees in the appropriate fields of study are awarded each year; and some 129,000 technicians and technologists will be needed annually while only 87,000 degrees are awarded annually. In order to meet the needs of the labor market, more emphasis by secondary and postsecondary institutions must be placed on career choice. Institutions must better utilize their counseling staffs and the technology available through the various state career and occupational information systems to ensure that the degree programs being offered and chosen by students will produce the numbers of graduates needed by the labor market.

In addition to these postsecondary programmatic concerns, specific attention mus given to improving the educational opportunities of those who drop out of school anc other educationally limited adults. In 1988, an estimated $85 million was spent on ad education in the Southeast, $21 million in Federal grant funds and $64 million in state matching funds.[49] Of this total, almost fifty-nine percent ($49.8 million) was spent in Florida. Half of the southeastern states failed to match their Federal grant funds for adult education with an equal amount of state funds. Adult and vocational education programs throughout the Southeast must be expanded and closer coordination with employers developed if those some now call the "*forgotten half*" of our society are to be adequately served.

In its report, *Challenge 2000*, the Southern Regional Education Board suggests, among other things, the following goals for education in the Southeast:

- each school system establish pre-school and kindergarten programs to help at-risk children prepare for school;
- student achievement for elementary and secondary students surpass national norms;
- the student dropout rate be cut in half;
- ninety percent of all adults have a high school diploma or equivalent;
- four out of every five students entering college will be ready for college level work;

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- significant gains be achieved in the mathematics, sciences, and communications competencies of vocational education students;

- the percentage of adults who have attended college or earned two year, four year, and graduate degrees be at the national average or higher;

- the quality and effectiveness of all colleges and universities be regularly assessed, with particular emphasis on the performance of undergraduate students; and

- all states and localities have schools with improved performance and productivity demonstrated by results.

In Summary...

This report has sought to outline the demographic, economic, and social trends impacting the Southeast and to share some thoughts concerning...*The changes an challenges facing our economy and labor markets, the magnitude and urgency of thes challenges, and our need to Build a Quality Workforce.*

If the Southeast is to close the gap between the skills needed by employers and the skills possessed by job applicants and employees, and build the quality workforce needed to be competitive in the global economy, efforts must be undertaken to:

Inform the public as well as all employers of the trends which are occurring and their possible impact.

Improve the quality of education provided all citizens through continued education reform.

Mobilize all employers to assist schools in ways that capitalize on their comparative strengths and advantages.

Shift from a short-range "Bottom Line" maximization of profit orientation of management to a long-range "Comprehensive" maximization of human capital orientation.

And...Mobilize the community . . . all sectors . . to integrate efforts to ensure a quality education for all people and a quality workforce for our nation, region, State and locality.

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APPENDIX

Table 1

U. S. DEPARTMENT OF LABOR GENERAL EDUCATION DEVELOPMENT (GED) SKILL LEVEL DEFINITIONS

	REASONING DEVELOPMENT	MATHEMATICAL DEVELOPMENT	LANGUAGE DEVELOPMENT
LEVEL 1	APPLY COMMON SENSE UNDERSTANDING TO CARRY OUT SIMPLE ONE OR TWO STEP INSTRUCTIONS. DEAL WITH STANDARDIZED SITUATIONS WITH OCCASIONAL OR NO VARIABLES IN OR FROM THOSE SITUATIONS ENCOUNTERED ON THE JOB.	COUNTING AND ADDITION AND SUBTRACTION OF TWO-PLACE NUMBERS. DEVELOP FAMILIARITY WITH STANDARD UNITS OF MEASUREMENT, AND WITH BASIC MEASURING EQUIPMENT, SUCH AS CLOCKS, RULERS, AND SCALES.	READ, SPEAK AND PRINT SIMPLE SENTENCES CONTAINING SUBJECT, VERB, AND OBJECT, USING PRESENT AND PAST TENSES.
LEVEL 2	APPLY COMMON SENSE UNDERSTANDING TO CARRY OUT DETAILED BUT UNINVOLVED WRITTEN OR ORAL INSTRUCTIONS. DEAL WITH PROBLEMS INVOLVING A FEW CONCRETE VARIABLES IN OR FROM STANDARDIZED SITUATIONS.	PERFORM THE FOUR BASIC ARITHMETIC OPERATIONS, USING WHOLE NUMBERS, AND COMMON AND DECIMAL FRACTIONS. DEVELOP KNOWLEDGE OF STANDARD UNITS OF MEASURE, AND THEIR INTERRELATIONSHIPS.	READ, WRITE, AND SPEAK COMPOUND AND COMPLEX SENTENCES USING ADJECTIVES AND ADVERBS, AND VARYING WORD ORDER IN PHRASES, CLAUSES AND SENTENCES. DISCERN AND ORGANIZE FACTS AND OPINIONS FOR WRITTEN AND ORAL COMMUNICATION.
LEVEL 3	APPLY COMMON SENSE UNDERSTANDING TO CARRY OUT INSTRUCTIONS FURNISHED IN WRITTEN, ORAL, OR DIAGRAMMATIC FORM. DEAL WITH PROBLEMS INVOLVING SEVERAL CONCRETE VARIABLES IN OR FROM STANDARDIZED SITUATIONS.	COMPUTE DISCOUNT, INTEREST, PERCENTAGE, SURFACE AREAS, VALUES, WEIGHTS, AND MEASURES, USING FOUR BASIC ARITHMETIC OPERATIONS.	SELECTIVE READING OF TEXT BOOKS AND OTHER MATERIAL TO EXTRACT ESSENTIAL THEME OR IDEA. COMPOSE THEMES REPORTS, AND ESSAYS FOLLOWING RULES OF GRAMMAR, SPELLING, NEATNESS AND FORMAT.
LEVEL 4	APPLY PRINCIPLES OF RATIONAL SYSTEMS TO SOLVE PRACTICAL PROBLEMS AND DEAL WITH A VARIETY OF CONCRETE VARIABLES IN SITUATIONS WHERE ONLY LIMITED STANDARDIZATION EXISTS. INTERPRET A VARIETY OF INSTRUCTIONS FURNISHED IN WRITTEN, ORAL, DIAGRAMMATIC OR SCHEDULED FORM.	PERFORM ARITHMETIC, ALGEBRAIC AND GEOMETRIC OPERATIONS AS APPLIED TO STANDARD SITUATIONS; PERFORM SHOP MATHEMATIC OPERATIONS IN PRACTICAL APPLICATION TO THE MANUAL ARTS.	SPEAK ON A VARIETY OF SUBJECTS. OR COMPOSE BUSINESS LETTERS, REPORTS SUMMARIES OR EXPOSITIONS CONFORMING TO RULES OF GRAMMAR, CONTINUITY, DICTION, COORDINATION, LENGTH OF HARMONY AND SEQUENCES OF SENTENCE AND PARAGRAPHS.
LEVEL 5	APPLY PRINCIPLES OF LOGIC OR SCIENTIFIC THINKING TO DEFINE PROBLEMS, COLLECT DATA, ESTABLISH FACTS AND DRAW VALID CONCLUSIONS. INTERPRET AN EXTENSIVE VARIETY OF TECHNICAL INSTRUCTIONS, IN BOOKS, MANUALS, OR MATHEMATICAL OR DIAGRAMMATIC FORM. DEAL WITH SEVERAL ABSTRACT OR CONCRETE VARIABLES.	APPLY KNOWLEDGE OF ESTABLISHED STATISTICAL AND MATHEMATICAL TECHNIQUES IN THE ANALYSIS AND EVALUATION OF DATA.	READ OR WRITE SPEECHES, BOOK AND PLAY REVIEWS, SCIENTIFIC AND TECHNICAL MATERIALS, ABSTRACTS, FINANCIAL REPORTS AND LEGAL DOCUMENTS. BE CONVERSANT IN THE THEORY, PRINCIPLES AND METHODS OF EFFECTIVE AND PERSUASIVE SPEAKING INCLUDING VOICE, DICTION AND PHONETICS, IN DISCUSSION AND DEBATE.
LEVEL 6	APPLY PRINCIPLES OF LOGICAL AND SCIENTIFIC THINKING TO A WIDE RANGE OF INTELLECTUAL AND PRACTICAL PROBLEMS. DEAL WITH NONVERBAL SYMBOLISM (FORMULAS, SCIENTIFIC EQUATIONS, GRAPHS, MUSICAL NOTES, ETC.) IN ITS MOST DIFFICULT PHASES. DEAL WITH A VARIETY OF ABSTRACT AND CONCRETE VARIABLES. COMPREHEND THE MOST ABSTRUSE CLASSES OF CONCEPTS.	APPLY KNOWLEDGE OF ESTABLISHED AND THEORETICAL MATHEMATICAL AND STATISTICAL CONCEPTS IN THE FIELD OF RESEARCH AND DEVELOPMENT.	SAME AS LEVEL V.

MDS&A, data source U.S. DOL

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Table 2

WHERE THE NEW REGIONAL JOBS WILL BE

OCCUPATIONAL GROUP	MEAN GED LEVEL FOR: Reasoning	Math	Language	PERCENT OF EMPLOYERS NEW JOBS BY OCCUPATION FOR: Private Sector	Public Sector Federal	State	Local	Educational
Management and Management-Related	5	4	4	14%	34%	26%	5%	3%
Management/Admin	5	4	4	10	8	6	2	3
Management Support	5	4	4	4	26	20	3	
Professional Specialty	5	4	5	16%	24%	21%	12%	53%
Engin.Arch.Surv.	5	5	5	2	8	2	2	
Natural.Comp.Math	6	6	6	2	10	1		1
Social Science	5	3	5		1	1	1	1
Social.Recre.Relig.	5	3	5	1		10	5	
Lawyers.Judicial	6	4	6	1	1	3	3	
Teachers.Lib.Coun.	5	3	5	4	1	2	1	50
Health Diag.&Treat.	5	4	5	5	4	1		1
Writers.Ent.	4	3	4	1				
Technicians	4	4	4	7%	13%	10%	4%	4%
Health	4	4	4	3	1	4	1	2
Engineering	4	4	4	1	4	3	1	
Other	4	3	4	3	8	4	2	2
Marketing and Sales	4	3	4	17%				
Administrative Support and Clerical	3	2	3	14%	20%	37%	58%	35%
Service Occupations	3	2	3	19%	5%	2%	10%	3%
Blue Collar and Precision Trade	3	2	3	17%	2%	2%	7%	1%
Laborers	2	1	1	3%	2%	2%	4%	1%

MDS&A, totals may exceed 100% due to rounding. Data from U.S.BLS and NOICC.

Table 3

THE FASTEST GROWING JOBS IN THE SOUTHEAST

OCCUPATION...	AVERAGE GED SKILL LEVEL REQUIRED		
	Reasoning	Math	Language
In the Private Sector			
Paralegal personnel	5	2	5
Medical assistants	4	4	4
Physical therapists	5	4	5
Physical and corrective therapy assistants and aides	4	3	4
Data processing equipment repairers	4	3	3
Home health aides	3	2	2
Podiatrists	5	4	5
Computer systems analysts	6	5	5
Medical records technicians	4	3	3
Employment interviewers	5	3	5
Average GED level required...........	4.5	3.3	4.1
In the Federal Government			
Computer systems analysts	6	5	5
Accountants and auditors	5	5	5
General paraprofessionals and technicians	5	3	5
Legal assistants and clerks	5	3	5
Physicians and surgeons	6	5	5
Electrical and electronic engineers	5	5	5
Management analysts	5	5	5
Engineering technicians	5	4	4
Employment interviewers	5	3	5
General engineers	5	5	5
Average GED level required...........	5.2	4.3	4.9
In State Governments			
Correctional officers	3	2	2
Social workers	5	3	5
Social welfare services workers	5	3	5
General management support personnel	5	4	4
General paraprofessionals and technicians	5	3	5
Electrical and electronic engineers	5	5	5
Employment interviewers	5	3	5
Health technicians	4	4	4
Lawyers	6	4	6
Child care workers	3	2	2
Average GED level required...........	4.6	3.3	4.3
In Local Governments			
Police patrol officers	4	2	3
Fire fighters	4	2	3
General protective service workers	3	2	3
General office clerks	4	3	4
Social workers	5	3	5
Gardeners and grounds keepers	2	1	2
Correctional officers	3	2	2
Lawyers	6	4	6
Building cleaning and service workers	3	1	2
Highway maintenance workers	3	1	2
Average GED level required...........	3.7	2.1	3.2

MDS&A, based on data from U.S. BLS and NOICC.

Table 4

SOURCES OF QUALIFYING AND UPGRADING TRAINING FOR AMERICAN WORKERS
(All Employees)

	Percent With Qualifying Training				Percent With Upgrading Training			
			Employer-Based				Employer-Based	
OCCUPATIONAL GROUP	Total	From School	Formal	Informal	Total	From School	Formal	Informal
ALL EMPLOYEES	55	29	10	26	35	12	11	14
General Managers	71	43	12	39	47	18	17	16
Technical Professionals	94	83	14	23	63	25	23	17
Nontechnical Professionals	92	87	6	16	47	47	10	11
Management Support Spec.	77	52	11	38	52	20	20	17
Technicians	85	58	14	32	52	20	18	19
Administrative Office/Clerical	57	33	7	31	32	10	10	15
Sales	43	15	12	28	32	7	13	15
Service	36	13	9	18	25	7	8	12
Transportation	36	2	8	26	18	2	6	9
Machine Operators	37	6	6	26	22	3	4	16
Craft	66	11	16	44	26	7	7	13
Precision Production	61	17	15	38	36	8	13	18
Mechanics and Repairers	68	19	18	39	44	7	22	17
Extractive	56	4	13	48	34	6	13	18
Laborers	18	2	2	13	14	2	2	10

MDS&A. data taken from DOL/ASTD publication *The Learning Enterprise*.

Table 5

MISMATCH BETWEEN WORKPLACE DEMAND FOR INDIVIDUALS WITH POSTSECONDARY EDUCATION AND THE NUMBER OF INDIVIDUALS RECEIVING DEGREES ANNUALLY FROM REGIONAL POSTSECONDARY INSTITUTIONS

JOB CATEGORY	EDUCATIONAL DEGREE NORMALLY REQUIRED (Major Field to 01 level)	AVERAGE ANNUAL OPENINGS REQUIRING COLLEGE DEGREE (New & Replacement Jobs)			AVERAGE NUMBER OF DEGREES CONFERRED ANNUALLY (All levels)			DIFFERENCE
		TOTAL	1-3 Yrs.	4+ Yrs.	TOTAL	1-3 Yrs.	4+ Yrs	
Management and Management Related	Business & Management (0600) Business & Office (0700) Marketing & Distribution (0800) Communications (0900)	166,747	54,131	112,616	71,066	19,145	51,941	-95,661
Professional Specialties:		175,462	14,033	145,365	106,313	8,875	97,438	-69,149
Engineers, Architects, and Surveyors	Architecture & Envir.Dgn.(0400) Engineering (1400)	21,077	5,143	16,019	17,674	3,983	13,691	-3,403
Natural, Computer, and Math Sciences	Communication Tech. (1000) Computer & Info.Sci. (1100) Life Sciences (2600) Mathematics (2700) Physical Sciences (4000)	18,692	6,804	11,888	22,046	2,666	19,380	+3,354
Social Scientist	Psychology (4200) Social Sciences (4500)	2,385	458	1,927	19,150	137	19,022	+16,774
Lawyers	Law (1st Prof.) (220101)	11,692	-	11,692	4,480	-	4,480	-7,212
Teachers, Librarians, Counselors	Education (1300) Vocational Ed. (2000) Foreign Language (1600) Home Economics (1900) Industrial Arts (2100) Letters (2300) Library Sciences (2500)	51,462	9,719	41,743	38,658	2,089	36,569	-12,804
Health Diagnosing and Treatment	First Professional Degrees	70,154	-	70,154	4,206	-	4,206	-65,858
Technician and Technologists		129,225	70,963	58,142	86,968	57,834	29,134	-42,257
Engineering	Engineering & Related	79,769	43,446	36,323	43,484	28,917	14,567	-36,285
Health	Allied Health	15,156	7,556	7,500	12,569	9,235	3,334	-2,587
	Health Sciences	34,300	19,981	14,319	30,915	19,682	11,233	-3,385
ALL JOBS		1,169,270	572,770	596,500	292,002	90,608	192,304	-877,268

MDS&A, estimates based upon data from Southern Regional Education Board, the U. S. Department of Education, the NOICC Crosswalk Center, and the National Planning Association.

FOREIGN INVESTMENT AND BUSINESS OPERATIONS WITHIN THE SOUTHEAST REGION

By State and Country

STATE	Total Foreign Investment (In Billions)	Total Foreign Operations (# of Businesses)	United Kingdom	Canada	Germany	Japan	Switzerland	France	Latin America	Netherlands	Australia, New Zealand, & South Afr.	All Others
Alabama	3.5 (7%)	339 (8%)	95	46	48	43	26	22	13	21	13	12
Florida	9.5 (20%)	944 (23%)	200	154	109	93	75	76	118	39	24	56
Georgia	8.6 (18%)	951 (23%)	201	180	145	141	88	59	32	46	23	36
Kentucky	4.0 (9%)	321 (8%)	87	51	47	35	26	23	12	16	14	10
Mississippi	2.4 (5%)	242 (6%)	60	36	27	22	22	19	10	13	4	20
North Carolina	8.3 (18%)	552 (13%)	126	60	98	74	61	42	20	27	16	19
South Carolina	5.7 (12%)	325 (8%)	72	42	57	35	41	29	10	19	10	10
Tennessee	5.2 (11%)	409 (11%)	111	66	65	76	44	34	14	22	16	11
Southeast Region	$47.2 Billion	4133	981 (27%)	644 (16%)	596 (14%)	519 (13%)	383 (9%)	304 (7%)	229 (6%)	203 (5%)	120 (3%)	174 (4%)

MDS&A, based on information obtained from the U. S. Department of Commerce, International Trade Administration, data as of 1987.
Note: Percentages shown in parenthesis in the state columns are of total foreign investment and operations in region. The percentages shown in parenthesis under the Country total columns relate to the country's total investment in U.S.

Table 7

GENERAL TYPES OF TRAINING PROVIDED BY AMERICAN EMPLOYERS DURING TWO PERIODS OF TIME, 1985 and 1988

In Rank Order by Percent of Change, High to low

Type of Training	Percent Providing in 1985	Percent Providing in 1988	Change
Computer Literacy/ Basic Computer Skills	48.2	59.2	+11.0%
Management Skills & Development	74.3	81.3	+7.0%
Clerical/Secretarial Skills	52.9	59.7	+6.8%
Disease Prevention/ Health/Wellness	38.9	45.5	+6.6%
Remedial Basic Education	18.0	24.3	+6.3%
Communications Skills	66.8	72.1	+5.3%
Supervisory Skills	73.7	78.9	+5.2%
Personal Growth	51.9	56.0	+4.1%
Technical Skills/ Knowledge Updating	72.7	76.4	+3.7%
Customer Education	35.7	38.3	+2.6%
New Methods/Procedures	56.5	58.6	+2.1%
Employee/Labor Relations	44.9	45.3	+0.4%
Customer Relations/Services	63.6	63.6	NC
Executive Development	56.5	55.8	-0.7%
Sales Skills	54.1	47.8	-6.3%

MDS&A, data taken from Training Magazine's Industry Reports for 1985 & 1988.

Table 8

SPECIFIC TYPES OF TRAINING PROVIDED BY AMERICAN EMPLOYERS

In Rank Order by Percent of Change, High to Low

Training	Percent Provided in 1985	Percent Provided in 1988	Change
Listening skills	41.0	52.4	11.4%
Outplacement & Retirement planning	13.9	24.0	10.1%
Safety	41.9	51.0	9.1%
Public speaking & Presentation skills	36.3	45.3	9.0%
Delegation skills	37.9	46.8	8.9%
Word processing	54.9	63.5	8.6%
Problem-solving	39.6	48.0	8.4%
Finance	20.1	28.4	8.3%
Strategic planning	26.0	34.2	8.2%
Data processing	31.6	39.5	7.9%
Leadership	54.1	62.0	7.9%
Time management	55.7	63.3	7.6%
Team-building	44.2	51.2	7.0%
Writing skills	33.7	41.4	6.7%
Hiring & Selection processes	53.0	59.6	6.6%
Planning	35.7	42.3	6.6%
Foreign language(s)	4.5	10.9	6.4%
Negotiating skills	29.7	35.9	6.2%
Reading skills	13.2	19.3	6.1%
Performance appraisals	60.8	66.2	5.4%
Management information systems	34.1	39.4	5.4%
Stress management	49.9	54.8	4.9%
Computer programming	36.8	40.6	4.8%
Conducting meetings	33.9	38.4	4.5%
Purchasing	20.7	24.9	4.2%
Decision-making	39.4	43.2	3.8%
Interpersonal skills	41.5	45.1	3.6%
Train-the-trainer	49.4	52.6	3.2%
Product knowledge	54.1	56.9	2.8%
Goal-setting	43.5	44.9	1.4%
New employee orientation	79.8	80.7	0.9%
New equipment operation	61.3	60.9	0.4%

Training Specifically Identified As Being Provided in 1985 But Not Specifically Identified in 1988

Customer relations	47.5
Beginning sales skills	43.7
Advanced sales skills	36.9
Nutrition	15.7
Research & Development	13.7
Manufacturing (e.g. production planning, cost estimating)	10.9

Training Specifically Identified As Being Provided in 1988 But Not Specifically Identified in 1985

Motivation	48.7
Personal computer applications	42.8
Managing change	40.0
Substance abuse	35.0
Smoking cessation	34.4
Quality control	34.1
Creativity	21.6
Ethics	19.7
Other (topics not listed)	4.9

MDS&A, data taken from Training Magazine's Industry Reports for 1985 & 1988.

Table 9

GENERAL TYPES OF TRAINING PROVIDED BY AMERICAN EMPLOYERS FOR TWO PERIODS, 1985 and 1988
By Industry

Types of Training	Manuf.	Trans./Comm. Publ. Util.	Trade	Fin./Ins. Banking	Business Services	Health Services	Education Services	Public Admin.	All Industries
	85 / 88	85 / 88	85 / 88	85 / 88	85 / 88	85 / 88	85 / 88	85 / 88	85 / 88
Executive Development	49.0/ 53.0 (+3.1)	55.9/ 35.5 (- 20.4)	49.7/ 60.7 (+ 11.0)	56.4/ 59.5 (+ 3.1)	57.1/ 47.1 (- 10.0)	63.1/ 71.1 (+ 8.0)	52.8/ 51.4 (- 1.4)	73.5/ 63.3 (- 10.2)	56.5/ 55.8 (+ .7)
Management Skills & Dev.	71.8/ 78.8 (+ 7.0)	55.6/ 68.3 (+ 12.7)	80.8/ 84.0 (+ 3.2)	75.0/ 87.3 (+ 12.3)	71.4/ 78.0 (+ 6.6)	87.0/ 91.0 (+ 4.0)	54.7/ 62.3 (+ 7.6)	96.8/ 87.6 (- 8.2)	74.3/ 81.3 (+ 7.0)
Supervisory Skills	60.5/ 74.7 (+ 4.9)	62.3/ 59.5 (- 2.8)	65.0/ 66.1 (+ 1.1)	78.3/ 88.5 (+ 10.2)	65.3/ 75.5 (+ 10.2)	80.6/ 86.0 (+ 4.5)	77.9/ 62.1 (- 15.8)	89.7/ 92.5 (+ 2.8)	73.7/ 78.9 (+ 5.2)
Technical Skills & Knld. Update	66.4/ 77.3 (+ 11.9)	67.1/ 64.3 (- 2.8)	68.3/ 67.4 (- .9)	72.9/ 87.9 (+ 15.0)	78.5/ 76.4 (- 3.1)	81.2/ 80.8 (- .4)	63.8/ 53.5 (- 10.3)	86.3/ 80.2 (- 6.1)	72.7/ 76.4 (+ 3.7)
Clerical & Sect. Skills	44.0/ 51.0 (+ 7.0)	54.4/ 38.4 (- 16.0)	41.3/ 43.3 (+ 2.0)	51.8/ 61.4 (+ 9.6)	51.8/ 56.1 (+ 4.3)	57.2/ 71.0 (+ 13.8)	56.8/ 68.2 (+ 11.4)	81.7/ 72.3 (- 9.4)	52.9/ 59.7 (+ 6.8)
Commun. Skills	52.8/ 66.6 (+ 13.8)	58.3/ 62.1 (+ 3.8)	48.2/ 60.2 (+ 12.0)	74.9/ 81.9 (+ 7.0)	69.5/ 69.0 (- .5)	80.5/ 81.0 (+ .5)	63.1/ 58.2 (- 4.9)	84.5/ 78.8 (- 5.7)	66.8/ 72.1 (+ 5.3)
Customer Rel & Svc.	52.0/ 57.6 (+ 5.6)	64.1/ 38.4 (- 25.7)	83.4/ 43.3 (- 40.1)	80.5/ 61.4 (- 19.1)	55.3/ 56.1 (+ .8)	52.8/ 71.0 (+ 18.2)	43.9/ 68.2 (+ 24.3)	54.5/ 72.3 (+ 18.3)	63.6/ 59.7 (- 3.9)
New Methods & Proced.	44.4/ 51.1 (+ 6.7)	41.2/ 29.9 (- 11.3)	53.5/ 54.5 (+ 1.0)	64.3/ 72.2 (+ 7.9)	46.0/ 55.4 (+ 9.4)	73.8/ 68.5 (- 5.3)	42.6/ 50.5 (+ 7.9)	85.5/ 63.5 (- 22.0)	56.5/ 58.6 (+2.1)
Computer Lit. & Basic Skl.	41.7/ 55.5 (+ 13.8)	41.7/ 38.6 (- 3.1)	30.6/ 38.3 (+ 7.7)	51.3/ 67.5 (+ 16.2)	42.8/ 51.6 (+ 8.8)	41.4/ 62.9 (+ 21.5)	65.7/ 63.6 (- 2.1)	74.4/ 68.9 (- 5.5)	48.2/ 59.2 (+ 11.0)
Employee Labor Rel.	42.8/ 53.3 (+ 10.5)	53.7/ 30.6 (- 23.1)	37.9/ 40.7 (+ 2.8)	35.0/ 44.4 (+ 9.4)	38.5/ 28.8 (- 9.7)	49.4/ 54.0 (+ 4.6)	50.8/ 37.7 (- 13.1)	83.4/ 57.8 (- 25.6)	44.9/ 45.3 (+ .4)
Disease Prev. Health Prom. Wellness	34.4/ 38.5 (+ 4.1)	39.9/ 27.3 (- 12.6)	32.7/ 23.4 (- 9.3)	29.5/ 42.4 (+ 12.9)	34.7/ 37.4 (+ 2.7)	81.5/ 74.7 (- 6.8)	31.6/ 50.8 (+ 19.2)	61.7/ 63.4 (+ 1.7)	38.9/ 45.5 (+ 6.6)
Sales Skills	64.7/ 60.2 (- 4.5)	53.0/ 54.6 (+ 1.6)	65.6/ 69.4 (+ 3.8)	73.3/ 82.9 (+ 9.6)	47.5/ 43.6 (- 3.9)	24.3/ 12.8 (- 11.5)	37.6/ 22.3 (+ 15.3)	2.1/ 8.2 (+ 6.1)	54.1/ 47.8 (+ 6.3)
Personal Growth	45.5/ 50.1 (+ 4.6)	50.2/ 34.8 (- 15.4)	36.9/ 49.8 (+ 12.9)	54.5/ 64.3 (+ 9.8)	53.1/ 50.9 (- 2.2)	58.9/ 65.4 (+ 6.5)	45.1/ 55.5 (+ 10.4)	72.8/ 61.5 (- 11.3)	51.9/ 56.0 (+ 4.1)
Customer Education	34.3/ 39.5 (+ 5.2)	46.4/ 38.0 (- 8.4)	37.8/ 58.4 (+ 20.6)	37.5/ 40.3 (+ 2.8)	43.3/ 46.8 (+ 3.5)	46.5/ 35.8 (- 10.7)	24.4/ 25.1 (+ .7)	8.0/ 26.8 (+ 18.8)	35.7/ 38.3 (+ 2.6)
Remedial Basic Ed.	20.1/ 30.2 (+ 10.1)	21.2/ 9.7 (- 11.5)	11.1/ 7.0 (- 4.1)	16.2/ 17.3 (+ 1.1)	14.3/ 25.7 (+ 11.4)	15.8/ 29.2 (+ 13.4)	26.9/ 41.6 (+ 14.7)	23.6/ 21.7 (- 1.9)	18.0/ 24.3 (+ 6.3)

MDS&A, data taken from Training Magazine's Industry Reports for 1985 & 1988. All figures refer to percent of organizations within each industry that offer formal training in each category (e.g., of all manufacturing companies 49.9% provided executive development in 1985, while 53.0% provided it in 1988, an increase of 3.1%).

Table 10

MAJOR OCCUPATIONAL CATEGORIES OF EMPLOYEES WHO RECEIVED EMPLOYER PROVIDED TRAINING FOR TWO PERIODS, 1985 and 1988

In Rank Order by Percent of Change, High to Low

JOB CATEGORY	PERCENT PROVIDED TRAINING IN 1985	PERCENT PROVIDED TRAINING IN 1988	CHANGE
PROFESSIONALS	48.6	60.3	+ 11.7%
ADMINISTRATIVE OFFICE & CLERICAL	50.9	62.5	+ 11.6%
FIRST-LEVEL SUPERVISORS	64.4	72.5	+ 8.1%
MIDDLE MANAGERS	69.9	77.8	+ 7.9%
SALES REPRESENTATIVES	37.1	43.0	+ 5.9%
SENIOR MANAGERS	60.0	56.8	+ 3.2%
PRODUCTION WORKERS	32.4	35.1	+ 2.7%
EXECUTIVES	67.1	64.5	+ 2.6%
CUSTOMER SERVICE	45.7	44.7	-1.0%

MDS&A, data taken from Training Magazine's Industry Reports for 1985 & 1988.

Table 11

TOTAL ENROLLMENT
SOUTHEAST REGIONAL INSTITUTIONS OF HIGHER EDUCATION

LOCATION (STATE)	Total	White	Female	Percent of Total	Minority	Percent of Total
United States	12,500,798	9,914,183	6,725,834	54%	2,242,845	18.4%
S.E. Region	1,752,575	1,371,282	948,788	54%	343,437	19.6%
	(14%)	(14%)	(14%)		(15%)	
Alabama	181,447	137,301	95,232	52.4	40,076	22.6
Florida	477,210	362,346	259,184	54.3	100,176	21.7
Georgia	195,123	150,953	102,666	52.6	38,842	20.5
Kentucky	144,548	132,581	81,063	56.1	10,339	7.2
Mississippi	101,095	69,232	54,593	54.2	30,088	30.3
North Carolina	322,966	253,062	177,768	55.0	65,098	20.5
South Carolina	134,116	103,801	73,509	54.8	28,074	21.3
Tennessee	197,070	162,006	104,773	53.2	30,744	16.0

MINORITY BREAKDOWN

LOCATION (STATE)	Black	Hispanic	Asian/Pacif.	Amer. Ind.	Nonresid. Alien
United States	1,080,899	623,591	448,222	90,133	343,770
S. E. Region	264,684	55,474	17,801	5,478	38,856
Alabama	37,690	828	1,182	376	4,070
Florida	44,301	47,434	7,219	1,222	14,688
Georgia	34,303	1,806	2,427	306	5,328
Kentucky	8,803	341	872	323	1,628
Mississippi	28,785	631	427	245	1775
North Carolina	57,370	1,957	3,313	2,458	4,806
South Carolina	25,924	965	978	207	2,241
Tennessee	27,508	1,512	1,383	341	4,320

MDS&A. total enrollment includes those in two and four year institutions and is not based on degree fields.
Data from SREB and National Center for Education Statistics, U. S. Department of Education, 1986.

Table 12

ENROLLMENT OF BLACK AND HISPANIC STUDENTS IN SOUTHEAST REGIONAL POSTSECONDARY INSTITUTIONS BY DEGREE PROGRAM

LOCATION (STATE)	Total	Percent in Black Sch.	Percent in Two Yr. Prog.	Percent in Undergrad.	Percent in Graduate	Percent in First Prof.
BLACK STUDENTS						
United States	1,080,899	29	43	9	5	5
S. E. Region	264,684	38	37	18	10	7
Alabama	37,690	47	39	22	12	7
Florida	44,301	19	50	10	6	3
Georgia	34,303	43	22	19	11	14
Kentucky	8,803	0	32	7	3	3
Mississippi	28,785	49	41	30	19	5
North Carolina	57,370	37	42	19	10	8
South Carolina	25,924	33	40	21	11	5
Tennessee	27,508	40	33	15	9	13
HISPANIC STUDENTS						
United States	623,581		46	6	4	4
S. E. Region	55,474		44	2	1	2
Alabama	828		33	.4	.6	.6
Florida	47,434		58	10	6	10
Georgia	1,806		17	1	1	2
Kentucky	341		20	.2	.4	.4
Mississippi	631		77	.7	.3	.8
North Carolina	1,957		43	.6	.6	.6
South Carolina	965		51	.8	.4	.8
Tennessee	1,512		51	.8	.4	1

MDS&A, based on data fron the Southern Regional Educational Board and the U. S. Department of Education 1986 Enrollment.

Table 13

CHANGE IN NUMBER OF BACHELOR DEGREES CONFERRED BY INSTITUTIONS OF HIGHER EDUCATION 1976/77 TO 1985/86

DISCIPLINE DIVISION/ FIELD OF STUDY	NUMBER CONFERRED 1976-77	NUMBER CONFERRED 1985-86	PERCENT CHANGE
Total	919,549	987,823	7%
Agriculture & natural resources	21,467	16,823	-22
Architecture & environ. design	9,222	9,119	-1
Area and ethnic studies	3,450	3,060	-11
Business and management	150,964	238,160	58
Communications	21,698	41,666	92
Communication technologies	1,516	1,425	-6
Computer & inform. sciences	6,407	41,889	554
Education	143,722	87,221	-39
Engineering	40,936	76,333	86
Engineering technologies	8,347	19,620	135
Foreign languages	13,944	10,102	-28
Health sciences	57,122	64,535	13
Home economics	17,439	15,288	-12
Law	559	1,197	114
Letters	38,849	35,434	-9
Liberal/general studies	16,763	19,248	15
Library & archival sciences	781	157	-80
Life sciences	53,605	38,524	-28
Mathematics	14,196	16,306	15
Military sciences	933	256	-73
Multi/interdisciplinary study	17,149	15,700	-8
Parks & recreation	5,514	4,433	-20
Philosophy & religion	8,158	6,239	-24
Theology	6,109	5,602	-8
Physical sciences	22,497	21,731	-3
Psychology	47,373	40,521	-15
Protective services	14,530	12,704	-13
Public affairs	17,627	13,878	-21
Social sciences	116,879	93,703	-20
Visual & performing arts	41,793	36,949	-12

NOTE: Based on data from the U. S. Department of Education, Center for Education Statistics. During period 21 degree disciplines/fields declined an average of 21.6% and 9 degree disciplines/ fields increased an average of 120%; with the disciplines of Computer & information sciences (up 554%), Engineering technologies (up 135%), and Law (up 114%) increasing the most while the disciplines of Library and archival sciences (down 80%), Military sciences (down 73%), and Education (down 39%) declined the most.

MDS&A

Table 14

DEGREES AWARDED BY SOUTHEAST REGION INSTITUTIONS OF HIGHER EDUCATION BY FIELD OF STUDY AND DEGREE

FIELD OF STUDY	Total Number Degrees	Percent of all Degrees	Bachelor's Degree Number/Percent		Master's Degree Number/Percent		Doctorate Number/Percent	
All Fields	**180,433**		**140,699**		**37,417**		**3,978**	
Business & Managment	43,715	24	36,043	27	7,524	20	148	4
Education	31,894	18	15,963	11	14,719	39	1,212	31
Social Science	12,387	7	11,239	8	962	3	186	5
Engineering	11,454	6	9,290	7	1,926	5	195	6
Health Sciences	9,056	5	7,298	5	1,638	4	120	3
Psychology	6,453	4	5,178	4	1,005	3	270	7
Life Sciences	6,056	3	4,923	4	680	2	453	11
Communications	5,991	3	5,717	4	262	.7	12	.3
Computer/Info Science	5,953	3	5,174	4	770	2	9	[illegible]
Letters	4,614	3	3,900	3	597	2	117	3
Visual & Perf. Arts	4,603	3	3,970	3	598	2	35	
Physical Science	4,026	2	3,196	2	548	2	282	7
Public Affairs	3,479	2	1,773	1	1,655	4	51	1
Engineering and Related Technologies	3,334	2	3,250	2	84	.2	0	0
Protective Services	3,249	2	3,024	2	220	.6	5	.1
Mathematics	2,715	2	2,328	2	332	.9	55	1
ALL OTHER FIELDS	21,454	12	18,433	13	3,897	10	828	21

MDS&A, based on data from the Southern Regional Education Board and the U. S. Department of Education 1986

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Table 15

DEGREES AND CERTIFICATES AWARDED BY PUBLIC POSTSECONDARY INSTITUTIONS IN THE SOUTHEAST

LOCATION (STATE)	ASSOCIATE		BACHELOR'S		MASTER'S		DOCTORIAL		FIRST PROF.DEG.	
	% Blk.	% Fem.	% Blk.	% Fem.	% Blk.	% Fem.	% Blk.	%Fem.	% Blk.	% Fem.
United States	446,047		987,823		288,567		33,653		77,910	
	9%	55%	6%	51%	5%	50%	4%	34%	4%	33%
S. E. Region	57,067		103,727		28,424		2,845		10,210	
	19%	59%	13%	52%	10%	56%	7%	35%	6%	29%
Alabama	4,115		13,747		3,474		264		855	
	22%	55%	15%	52%	11%	52%	8%	45%	6%	30%
Florida	23,911		21,169		4,562		656		1,823	
	8%	54%	8%	49%	7%	50%	6%	38%	2%	37%
Georgia	3,408		13,785		5,155		539		1,946	
	16%	61%	14%	52%	10%	58%	8%	36%	9%	31%
Kentucky	4,145		9,251		2,872		167		1,281	
	24%	66%	4%	52%	3%	61%	2%	22%	2%	28%
Mississippi	3,843		7,508		1,979		235		500	
	28%	62%	23%	53%	21%	54%	8%	35%	7%	23%
N.Carolina	9,419		16,760		4,303		526		1,662	
	18%	56%	15%	53%	9%	56%	4%	36%	7%	31%
S.Carolina	4,373		8,970		2,645		212		661	
	25%	59%	15%	53%	11%	60%	3%	30%	3%	22%
Tennessee	3,853		12,537		3,434		246		1,482	
	13%	60%	10%	50%	6%	57%	6%	39%	10%	26%

MDS&A, based on data from the Southern Regional Education Board and the U. S. Department of Education 1986.

NOTES

1. Report commissioned by the U. S. Department of Labor from the Hudson Institute issued June 1987.
2. Published in *Occupational Outlook Quarterly*, Fall 1987; and as a Special Bulle n March, 1988 (Number 2302).
3. Joint initiatives involving DOL have included one with the U. S. Department of Education which resulted in the issuance of the publication, *The Bottom Line: Basic Skills In The Workplace*, with the U. S. Department of Health and Human Services, which resulted in the issuance of the publication, *Count On Me...Youth 2000*, and a current two-year joint research effort with the American Society of Training and Development which is looking at basic workplace skills. This DOL/ASTD initiative has resulted in the issuance of two publications, one titled *Workplace Basics: The Skills Employers Want*, and another titled *The Learning Enterprise*. In addition, a set of "best practices" texts are planned for publication.
4. While a number of reports and publications have been issued by various public and private sector organizations concerned with the effect projected demographic, economic and social trends will have on the workplace and workforce, the following exemplify those supportive of DOL's initiatives, particularly in the Southeast.
   - *Employment Policies: Looking To The Year 2000*, the National Alliance of Business (NAB);
   - *Youth 2000: A Call For Action*, NAB;
   - *The Fourth 'R': Workforce Readiness*, NAB;
   - *Halfway Home And A Long Way To Go*, report of the 1986 Commission on The Future of the South; and
   - *Meeting The Economic Challenge of the 1990's: Workforce Literacy in the South*, report by MDC, Inc. for the Sunbelt Institute.
5. This report, one of the first of its kind in the nation, was developed primarily a source of information for DOL officials on the impact of demographic, economic and social trends projected for the Southeast region and each of its eight states. While developed as a resource for internal use, copies of the report have been provided to numerous outside interests.
6. At the request of the Southeast Regional Office of the National Alliance of Business, the DOL/ETA Southeast Regional Office participated in a joint research project which sought to demonstrate how the *Workforce 2000* demographic, economic, and social trends projected for the nation could be localized. This innovative effort incorporated data relating to the impact of various social issues such as teenage pregnancy, out-of-wedlock births, homelessness, substance abuse, poverty, and adult illiteracy; as well as detailed commentary on current community and employer efforts in human resource development and basic skills enhancement activities. While the full report was not published, an executive summary dealing with those aspects of the report concerning adult illiteracy was published with the assistance of IBM.
7. A Regional Leadership Conference was called by the DOL/ETA Atlanta Regional Administrator. Convened in Peachtree City, Georgia, during February, 1988, the conference sought to provide a setting in which top public and private sector leaders from each of the eight Southeast states could review and discuss the *Workforce 2000* demographics and issues, then develop an action plan for the Governor of each southeastern state.
8. The data used to describe each of the six trends, as well as other aspects of this report, come from various sources, including the U. S. Bureau of the Census and the U. S. Bureau of Labor Statistics. The primary source of data used for the regional demographic and employment projections was the *Regional Econom*

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Projections Series 87-R-2, "Regional Economic Growth in the United States: Projections for 1987-2000," Volume I, II, and III, published by the National Planning Association (NPA). This information was supplemented by area specific data from various other regional sources including the Southern Regional Education Board and the labor market information and research units of the eight southeastern State Employment Security agencies.

9. The Department of Labor classifies the nation's industries and business activities into ten (10) major groups (see Graphic 10). Those industries which make up the "goods-producing sector" of the economy are agriculture (including forestry and fishing), mining, construction, and manufacturing. Those industries which make up the "service-producing sector" are T.C.P. (transportation, communications, and public utilities), trade, F.I.R.E. (finance, insurance, and real estate), services, and government.
10. Based upon national projections of the U. S. Bureau of Labor Statistics.
11. The skill ratings referred to are those developed and defined by DOL and identified in supplemental volumes for the Dictionary of Occupational Titles for general educational development. The skill levels relate to reasoning, mathematical, and language development that a worker should possess upon entering a given job. The DOL GED levels range from one, the lowest level of complexity, to six, the highest level of complexity and are cumulative.
12. Labor force participation rates for 1987 averaged 78.4% for white males age 20 and over compared to 74.7% for nonwhite males, 55.6% for white females, and 60.0% for nonwhite females (BLS unpublished data).
13. Work experience averages were derived from data obtained from the National Commission for Employment Policy, The Institute for Social Research at the University of Michigan, the U. S. Bureau of Labor Statistics and the U. S. Bureau of the Census. The educational attainment information was derived from data obtained from the BLS and the Southern Regional Education Board.
14. Based upon information and statistical data obtained from the U. S. Department of Health and Human Services, The Adolescent Pregnancy Prevention Clearinghouse, and the Georgia Department of Human Resources.
15. Failure-to-graduate statistics provided by the U. S. Department of Education, with the economic costs calculated based upon information obtained from the Institute for Educational Leadership, BLS, and the reports, *The Forgotten Half* (W. T. Grant Foundation) and *Toward A More Perfect Union* (The Ford Foundation).
16. Based on the findings of the National Assessment of Educational Progress (NAEP) Study conducted by the Educational Testing Service, these individuals have difficulty and/or cannot do such common everyday things as:
    - ° stating in writing an argument made in a newspaper column,
    - ° orally interpreting a lengthy feature story in a newspaper,
    - ° interpreting the distinctions between two types of employee benefits,
    - ° following directions to travel from one location to another using a map,
    - ° using a bus schedule,
    - ° determining correct change using a simple restaurant menu, and/or
    - ° determining the amount of interest charges from a loan ad.
17. Information on adult functional illiteracy, the estimated size of the population and magnitude of the economic costs were derived from various studies, including *Looking To The Year 2000: A View From The Southeast.*
18. This definition comes from Webster's New Collegiate Dictionary. Poverty level income definitions or levels are set by and/or used by the U. S. Departments of Health and Human Services and Labor for grant-in-aid programs. Estimates are based on national statistics and area specific data from Census, BLS, and various state agencies.

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19. Final report of The W. T. Grant Foundation Commission on Work, Family and Citizenship, titled *The Forgotten Half: Pathways to Success For America's Youth and Young Families*, issued November, 1988.
20. Projections on homeless derived from information obtained from the Interagency Task Force on Homeless, The National Coalition for Homeless, and The Counc State Governments.
21. The economic cost projections were calculated based on information provided by the Interagency Task Force on Homeless.
22. The information and estimates provided on substance abuse are based upon information obtained from the Georgia Department of Human Resources and The National Clearinghouse for Drug Abuse Information.
23. National statistics obtained from the National Clearinghouse for Drug Abuse Information were used to project regional abuse estimates.
24. Surveys conducted by the American Management Association, the Employment Management Association, the College Placement Council, and the Placement Offices of Northwestern and Michigan State Universities confirm that about one-third of American employers test for drugs.
25. For the purpose of this report, the public sector is defined as including Federal civilian employment in agencies and enterprises; state and local government, excluding education and hospitals; and quasi-public agencies such as area planning commissions, transit authorities, etc. The data presented is based on NPA regional projections as supplemented by unpublished national projections and industry matrix data from the BLS.
26. Based on information contained in the Hudson Institute/U. S. Office of Personnel Management report *Civil Service 2000* , the General Accounting Office report *Managing Human Resources*, and regional projection data from NPA as supplemented by unpublished national projections and matrix data from BLS.
27. This two year research project is designed to look at workplace basic skills that employers want and the level of skill employees bring to the job. The estimate reported and used here come from the BLS study *How Workers Get Their Training*.
28. Projected based on unpublished BLS data on the educational attainment levels of the general civilian population, the current labor force, and non-labor force age and over.
29. Based on the findings of the National Assessment of Educational Progress; the national reading, writing, and math reports of the Educational Testing Service; and the U. S. DOE report *The Condition of Education*.
30. Based on information obtained from the Southern Regional Education Board.
31. National Assessment of Educational Progress data as supplemented by the U. S. DOE National Center for Educational Statistics.
32. The U. S. DOL/ASTD publication *Workplace Basics: Skills Employers Want* lists seven skill areas required by today's jobs. They are: learning to learn, the three R's (reading, writing, computation), communication (listening and oral), creative thinking (problem solving), self-esteem (goal setting-motivation/personal and career development), interpersonal skills (negotiation and teamwork), and leadership (organizational effectiveness).
33. Based on unpublished data from BLS, OPM, and a telephone survey of several state and local government agencies in the Southeast.
34. Based on findings of personnel practices surveys conducted as part of the DOL/NAB *Atlanta 2000* study and information from *How To Prevent Costly Turnover*, an article in the June, 1989 issue of *Business Atlanta*.
35. Unpublished BLS data as supplemented by a survey conducted for the DOL/NAB *Atlanta 2000* study.

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36. Based on Federal pay increases from 1982 through 1988 and state/local pay increases as reported in telephone survey of selected state merit systems in the Southeast.
37. According to unpublished BLS/OPM data private sector employees averaged the following increases in compensation: up 6.8% in 1982, 5.9% in 1983, 4.4% in 1984, 4.3% in 1985, 3.2% in 1986, 3.0% in 1987, and 4.4% in 1988. The cumulative increase from 1982 through 1988 was 32.0 percent. The President's pay agent found pay comparability off 18.5% in 1982 (Federal pay increase was 4.0), off 21.5% in 1983 (Federal pay increase was 4.0%), off 18.3% in 1984 (Federal pay increase was 3.5%), off 19.2% in 1985 (no Federal pay increase given), off 23.8% in 1986 (Federal pay increase was 3.0%), off 23.7% in 1987 (Federal pay increase was 2.0%), and off 26.3% in 1988 (Federal pay increase was 4.1%). A review of selected state merit system pay survey findings indicated that state salary structure is 15 to 30% off Federal and private sector pay.
38. *Civil Service 2000*, report of the Hudson Institute commissioned by the U. S. Office of Personnel Management; U. S. General Accounting Office report number GGD-89-19, *Managing Human Resources: Greater OPM Leadership Needed To Address Critical Issues; Attracting Quality Graduates To The Federal Government;* a special report of the U. S. Merit Systems Protection Board; and *Leadership For America: Rebuilding The Public Service*, the report of the National Commission on the Public Service.
39. Research findings by the Hudson Institute and the U. S. Office of Personnel Management have found that the average age of the Federal workforce is higher than the average age of either the workforce in general of the general population.
40. Based on data obtained from the U. S. Department of Commerce, International Trade Administration.
41. Based on unpublished data from the U. S. DOL, Employment and Training Administration, relating to requests for non-agricultural alien labor certification in the Southeast.
42. Bureau of National Affairs periodic survey *Recruitment and Selection Procedures*
43. Training Magazine's Industry Report, published October, 1988.
44. The "Three Secretaries Conference" was convened in Washington, D.C., in July, 1988 by DOL Secretary Ann McLaughlin, DOC Secretary C. William Verity, and DOE Secretary William J. Bennett. Fifty-eight participants including leaders and experts like Jack Anderson, syndicated columnist; Albert Shanker, President, American Federation of Teachers; Carroll Campbell, Governor, South Carolina; Eugene Dorset, President, Gannett Foundation; William Kolberg, President, National Alliance of Business; Robert Smith, Chair/CEO, General Motors; and Lamar Alexander, President, University of Tennessee, discussed and made recommendations on critical social issues such as adult illiteracy.
45. Based on information from the Southern Regional Education Board.
46. The December issue of the DOL/BLS *Monthly Labor Review* included an article which compared employee benefits in the public and private sectors. The information presented here is based on that study and the findings of various surveys conducted by the American Management Association as reported in the August, 1986, December 1986, February, 1987, and May, 1988 issues of *Personnel*.
47. Based on survey information reported in the February, 1987 issue of the AMA publication *Personnel*.
48. These comments are based on the recommendations published in the U. S. OPM report *Civil Service 2000* and the report of the National Commission on the Public Service, *Rebuilding the Public Service*.

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49. Based on information from the U. S. Department of Education, the fund allocation figures for adult education for program year 1988 were:

State	Federal Share	State Share	Total
Alabama	2,142,736	2,266,520	4,409,256 (5.2%)
Florida	4,281,142	45,535,360	49,816,508 (58.7%)
Georgia	2,904,502	1,416,458	4,320,960 (5.1%)
Kentucky	2,150,217	277,187	2,427,404 (2.9%)
Mississippi	1,487,288	155,500	1,642,788 (1.9%)
N. Carolina	3,223,762	10,272,982	13,496,744 (15.9%)
S. Carolina	1,823,605	3,959,805	5,783,410 (6.8%)
Tennessee	2,528,815	497,437	3,026,252 (3.6%)
Totals	20,542,067	64,381,249	84,923,316

50. Based on information published in the Southern Regional Education Board's report, *Challenge 2000: Goals For Education.*

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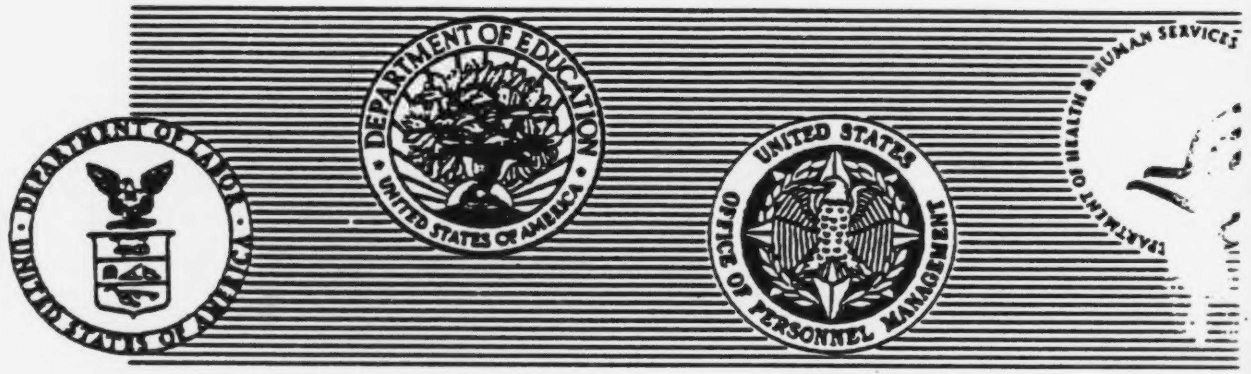
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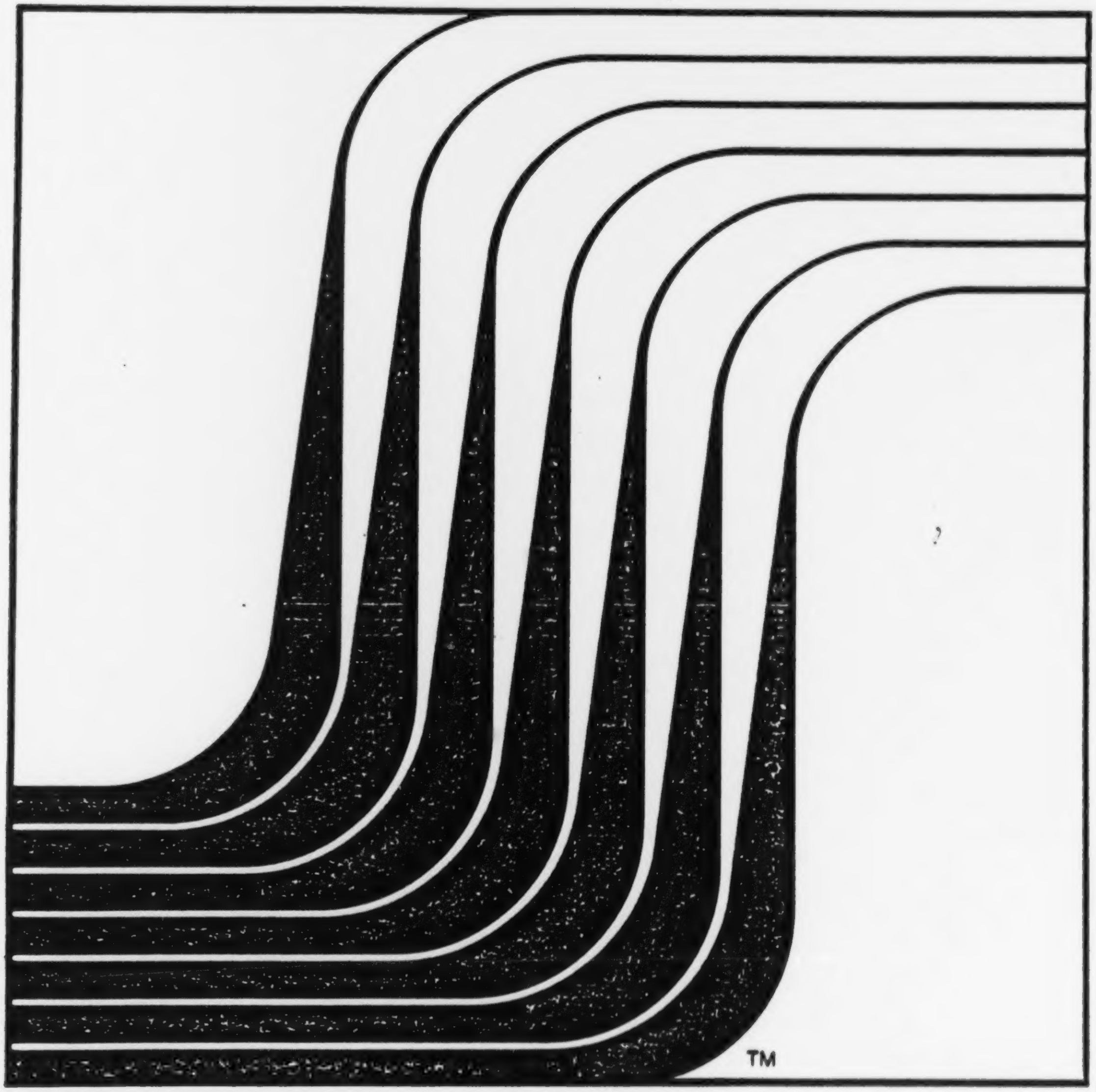

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Bank of America's commitment to successful business enterprise spans the 20th century. The bank was founded in 1904 by a small business owner, A.P. Giannini, to satisfy the unmet financial needs of emerging small businesses. A tailored line of financial products and services, professional guidance from knowledgeable experts, and this series of business management publications furnish the tools for small business growth and success—all from California's leading small business bank.

Steps to Starting a Business

Every year in the United States more than 600,000 new businesses are launched by independent men and women eager to make their own decisions, express their own ideas, and be their own bosses. These aspiring business owners venture forth with hopes of attaining the personal satisfaction that comes from the successful operation of one's own business.

The reality of business life is somewhat harsher. More than half of the businesses that failed in 1981 were in their first five years of operation. Survival is especially tough in today's economy, with the small business beset on all sides by fluctuating money conditions, rising costs, uncertain supply sources, and erratic markets. The new owner could lose everything—family car, life savings, even a home.

Then, too, owning a business—even a profitable one—is not as idyllic as it may seem. Being a boss confines one in a way that working for others does not. Far from being freer, the head of a business often works 15 hours a day, 7 days a week, and feels [illegible]sponsible to family members, suppliers, cus[illegible]ers, and employees. Gone are the days of a reg[illegible] paycheck, a 40-hour work week, paid vacations, retirement security, and reduced health and life insurance costs.

Yet managing one's own business *can* be a personally and financially rewarding experience for an individual strong enough to meet the test. A person with stamina, maturity, and creativity, one who is willing to make sacrifices and take risks, may find making a go of a struggling enterprise an exhilarating challenge with many compensations.

In the serious and complicated process of starting a business, there are certain questions that must be asked and answered. Then certain steps must be taken. Although some of them are very elementary—such as applying for a city business permit—the most important are often complex and difficult and require the advice of specialists: accountants, attorneys, insurance brokers, and bankers. The order in which these steps are undertaken will depend on the type of business. The first step for a prospective tavern operator, for example, might be to apply for a license from the Department of Alcoholic Beverage Control, since such licenses are difficult, expensive, and time-consuming to obtain.

For almost any business, though, the first step will be to translate the entrepreneur's basic idea into a concrete plan of action.

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Planning the Business

Every business begins with an idea—a product to be manufactured or sold, a service to be performed. Whatever the business or its degree of complexity, the prospective business owner needs a comprehensive plan in order to transform a vision into a working operation.

This business plan should describe, in writing and in figures, the proposed business and its products, services, or manufacturing process, and include an analysis of the market, a marketing strategy, and measurable financial objectives. The plan will be used by prospective lenders and investors as a means for evaluating potential success and by the business owner to assess continuously the strength of the operation.

The first task of the aspiring entrepreneur is to understand the nature of the business. The new business operator has to ask: What am I selling and to whom? What do I offer the marketplace? What does the marketplace offer me? What can I do to reach and adapt to this marketplace?

The nature of the product or service must be defined. What makes it unique or different? What makes it better than others already on the market? If production is involved, what engineering or design support will be needed? Should the product parts be manufactured or bought from outside sources and simply assembled?

The market must be mapped out and described. Is there evidence of a need for the product or service? Is the timing right? Is the primary market a certain type of business or the consumer of a certain age, income level, or geographical area?

Distribution must be determined. How will the product reach its market—through wholesalers or retailers?

The competition must be sized up. There are direct competitors who sell similar products and indirect competitors who sell possible substitutes that satisfy potential customers' needs. Who and where are these competitors? What are their strengths and weaknesses? How does the product or service measure up to those now in existence? Is it of higher quality or lower cost? What are the marketable differences?

A thorough market study provides the best means for answering these questions. A rudimentary plan can be developed by securing information from newspapers, trade journals and associations, chambers of commerce, banks, utility companies, libraries, federal and state agencies, local universities or state colleges, or city and county planning commissions. If the business operator lacks the time and know how to undertake extensive research, a professio research agency or consultant from a nearby university might be employed. In most cases, the expense of a thorough study is insignificant when compared to the costly effects of hasty or incompetent marketing decisions.

Next, **the expense for setting up shop must be accurately computed.** Insufficient financing is a major cause of small business failure. Adequate funding must allow for the following expenses:

☐ Down payment on the purchase of, or deposit on the lease for, business premises;
☐ Fixture or remodeling costs;
☐ Purchase or lease of equipment and machinery;
☐ Initial inventory purchases;
☐ Telephone and utility installation fees;
☐ Stationery and supply costs;
☐ Taxes and licenses;
☐ Professional services (accountant, attorney, consultant);
☐ Advertising and promotion;
☐ Insurance premiums; and
☐ Travel and dues.

Along with start-up costs, such operating expense as owner and employee wages must be covered u the business shows a profit. Since many enterprise take months or even years before they operate in the black, at the very least enough funds should be available to cover the first three months' operation and to provide a cash reserve for emergencies. (A cost-of-living budget and money-needs worksheet are provided on pages 16 and 17.)

In order for the plan to become a working tool, all monthly **income and expenses** should be estimated for at least the first year of operation (see profit and loss worksheet on page 18). Without realistic projections to follow, rough periods, which could have been predicted, become crises that cause many new businesses to fail.

The projected operating statement will show:

☐ Predicted sales volume and the rate at which it will expand;
☐ How much it will cost to produce or purchase the goods to be sold (such as materials, labor, freight);
☐ Fixed monthly operating expenses, including rent, utilities, and insurance premiums;
☐ Controllable monthly operating expenses, such as advertising, salaries, and accounting services; and
☐ Net monthly profit—the amount of money left *after* subtracting cost of goods and expenses fro sales and *before* paying taxes.

Next the entrepreneur can bring this on-paper profit and loss closer to reality by developing a **cash flow projection** to forecast actual cash surplus or deficit for each period. While the profit and loss statement shows recorded cash and credit sales and all new payments *due*, a cash flow statement (like that on page 19) subtracts the actual bills *paid* from the actual cash collected in a given period.

During the first year of business, in a time of sharp expansion, or whenever finances require close scrutiny, these financial projections should be recorded and monitored monthly. Later, and during stable business periods, quarterly or annual profit and loss and cash flow statements may be sufficient to keep management in control.

One more financial statement should be developed—a **balance sheet** listing what the business owns minus what it owes and its net worth at any particular moment. From a beginning balance sheet (see worksheet on page 20), the business owner can work toward an ideal balance sheet, using cash flow projections to help keep tabs on the company's progress.

Planning need not be a blind guessing game. In order to arrive at realistic projection figures, the business manager should consult trade associations, trade publications, suppliers, and other sources of information to determine appropriate standards of efficiency for the type and size of the business. Operating ratios common to various types of businesses are published by the National Cash Register Company (*Expenses in Retail Business*), the Robert Morris Associates (*Annual Statement Studies*), and Dun & Bradstreet, Inc. (*Key Business Ratios*).

The history of small business failures reveals that many firms fail from the cumulative effects of substandard performance and ongoing cost leaks resulting from poor management.

Before investing in a particular business, the prospective owner should consider return on investment: Will the rate of return on the money invested in the business be greater than the rate of return on the same money invested elsewhere? Financial experts consider return on investment (ROI ratio) one of the best criteria of profitability, often the key measure of management efficiency. The ratio, determined by dividing net profits (before income taxes) for a certain period by net worth at the end of the period, is expressed as a percentage.

$$\frac{\text{Net Profit (before taxes)}}{\text{Net Worth}} = \frac{\$10{,}000}{\$40{,}000} = 25\%$$

If the return is too low, the money could be better used elsewhere. The Robert Morris Associates also provides return on investment figures, yardsticks for determining a business's potential in light of industry performance.

The business operator with a realistic and well thought-out plan has the best chance for success. Decisions regarding financing and legal organization should come only after every aspect of the proposed enterprise has been analyzed.

Choosing the Legal Form of Business

To begin the move from a conceptual stage towards actual formation of a new business, the prospective owner might pose the following questions:

☐ How much money do I need? Where will it come from?

☐ What business skills are needed that I cannot provide?

☐ How much control do I want to have over the operation?

☐ How will the business be taxed?

☐ To what extent will I be personally responsible for debts or claims against the business?

☐ What will happen to the business if I am incapacitated for any length of time?

The responses to these questions will strongly influence—and be influenced by—the legal form of business the prospective owner initially selects. However, the organization of a business is a continuing question, and decisions are based on changing profits and growth of the operation. For instance, the person who starts out as a sole proprietor may at some point lack sufficient capital and seek a partner with available funds and complementary skills. Then the partners, after two or three years of operation, may elect to incorporate. All three forms of business ownership are open to the beginning entrepreneur.

Sole Proprietorship

When one person capitalizes a business using only his or her cash (and possibly loan proceeds), the firm is legally called a sole proprietorship. This individual makes or breaks the business, which may sound singularly appealing to those instilled with American entrepreneurial spirit. It is difficult to go it alone, however. The sole proprietor has sole responsibility and control. This person must provide or procure all the capital necessary to operate the business and is personally liable for all claims against the business.

On the other hand, the sole proprietorship is easy to initiate and is the least regulated form of business. Business income is taxed as personal income. The form is appealing to someone who wants the business to stay small and simple.

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General Partnership

A general partnership is the pooling of capital and skills of two or more people as co-owners to conduct business. An "idea person" and a "money person" often provide the formula for a partnership.

The general partnership is easy to set up, for it requires no official registration beyond that for any fictitious name the partners plan to use. Although a written agreement among partners is not required by law, it is wise to have an attorney draw up a contract spelling out respective rights and duties of the partners. Almost any management and profit-sharing arrangements are possible.

Death or withdrawal of one partner or the addition of a new partner legally terminates a partnership. This may not necessarily mean liquidation of the business; a new contract can be drawn up. But provisions for such dissolution in the original written contract ensure smooth transition of ownership and continuity of business operations.

A partnership is not a separate legal entity. Partnership liability extends to the personal assets of the general partners. And each partner is taxed on his or her share of the partnership income at the personal income tax rate.

Limited Partnership

The limited partnership is a refinement of the principle of partnership. More closely regulated than the general partnership, it permits investors to become partners without assuming unlimited liability. There must be at least one general partner. The limited partner usually risks only as much as his or her original investment and exercises limited control over the activities of the partnership.

The California Revised Limited Partnership Act governs this form of business in California. Beginning July 1, 1984, these partnerships are required to file their certificates of limited partnership with the Secretary of State's office. The filing fee is $70.

Corporation

"A corporation is an artificial being, invisible, intangible, and existing only in contemplation of the law," wrote Chief Justice John Marshall. In other words, the corporation exists as a separate entity apart from its owners, the shareholders. It makes contracts; it is liable; it pays taxes. It is a legal "person."

A corporation can attract capital by selling stock in the company to selected investors or to the public. However, small concerns seldom "go public" before they open their doors. Generally, stockholders are not liable for claims against the corporation beyond the amount of their original investment. Credit have claim only against the assets of the corpo tion, though officers may become personally liab in some cases.

The separate identity of the corporation makes possible its continuous existence. Death of a stockholder or sale of stock will not affect the ability of a corporation's managers to continue conducting business.

Although corporate taxation is heavy, the Economic Recovery Tax Act of 1981 lightens the tax load of small operations. In 1983, the corporate tax rate was reduced to 15 percent on the first $25,000 of taxable income and to 18 percent on taxable income between $25,000 and $50,000. The Act also increased the minimum accumulated earnings credit and eased rules for the last-in first-out (LIFO) inventory method to make the use of LIFO more accessible to small businesses.

Incorporation can be both costly and complicated. In California, the owners of a business must file articles of incorporation with the Secretary of State. The fee for filing stock articles of incorporation is $70. In addition, the annual minimum franchise tax of $200 must be prepaid. Both the filing fee and the tax prepayment are payable to the Secretary of State's office.

To issue stock, the owners of a business must ap to the Commissioner of Corporations of the state.

Subchapter S Corporation

A corporation that has no more than 35 shareholders and meets certain requirements may elect to have its shareholders taxed on their share of the corporate income instead of being taxed itself. In addition, certain trusts may qualify as Subchapter S shareholders. This form of business organization combines the advantages of operating in the corporate form with federal taxation in a manner more similar to a partnership. Since the corporation does not pay income tax, it files only an information return, just as a partnership does. California, however, does not give special treatment to Subchapter S companies. They have to pay taxes just like a regular corporation.

An attorney can help clarify the many technical aspects of this and other legal forms of business organization.

Obtaining Financing

Most aspiring business owners lack the necessary cash to launch a new enterprise. Along with using their own savings, they must seek funds from oth sources. Two types of financing may be obtained.

quity. Ownership dollars that are not repaid but instead entitle the investor to a say in the business and a percentage of future profits.

Debt. Borrowed dollars that must be repaid with interest but normally do not give the lender any ownership control.

To raise equity dollars, an individual may persuade friends, relatives, or other nonprofessional investors to invest their money in a share of the struggling new firm. Or equity funds can sometimes be obtained from private venture capital firms, federally funded Small Business Investment Companies (SBICs), or Minority Enterprise Small Business Investment Companies (MESBICs). However, these professional investors usually seek experienced managers with a vital product or service in a healthy industry and rarely provide seed money for new enterprises, especially retail operations.

Lenders are more numerous than investors—yet loans can be equally as difficult to obtain as equity dollars. Banks and the Small Business Administration (SBA) are the two places where most entrepreneurs turn.

nks generally limit long-term loans for business art-ups to 50 percent of the money needed. Lending officers look for borrowers with good credit ratings, experience in the businesses they propose to enter, and business plans that demonstrate ability to repay the loans. Interest rates and repayment schedules vary from bank to bank.

The Small Business Administration, a federally funded government agency, may make direct loans but more commonly guarantees up to 90 percent or $500,000 of a bank loan, whichever is less. The SBA will not make a direct loan if a business can obtain funds from a bank or other private source. An applicant's loan request must have been declined by at least one bank—two in a city with a population greater than 200,000—before the SBA will even consider a direct loan. And even then, the applicant may not be assured of obtaining a direct SBA loan.

The SBA prefers that standard commercial loans or guaranteed bank loans be matched by equal funds from the entrepreneur. However, in some cases they will finance a venture with thinner capitalization than normal borrowing would require if convinced of the favorable prospects of a business and impressed vith the owner's character and capability. Also, some embers of economically disadvantaged groups v qualify for special programs under which the A will lend or will guarantee a lender a larger portion of the start-up costs.

Some banks and other financial organizations also have special loan programs aimed at helping small business in general and minority entrepreneurs in particular. Under these programs, prospective borrowers may sometimes be allowed to invest less than the standard equity requirements in a business.

Both banks and the SBA require extensive documentation of the loan request, including:

☐ A resume of the applicant's education and work experience with emphasis on experience in the applicable industry;

☐ A personal financial statement showing net worth (page 15), plus income tax statements for at least the previous two years;

☐ A complete business plan, including projected monthly profit and loss statements, cash flow projections, and a projected balance sheet for the first year of business plus an explanation of how loan proceeds will be used;

☐ Equipment list and start-up costs (including leasehold improvements and detailed descriptions and prices of equipment and furnishings);

☐ Credit references;

☐ A copy of any lease agreement or insurance policy;

☐ Occasionally, a personal budget for the first three months of business (see page 16); and

☐ A copy of the franchise agreement, if applicable.

Although collateral is not an absolute requisite, in most cases banks and the SBA will ask that term loan requests be supported by personal guarantees, stocks and bonds, real estate, or equipment. Banks also offer special types of loans to purchase real estate and to buy or lease equipment.

Other lending avenues include consumer finance companies, commercial loan companies, savings and loan associations, and life insurance companies. Also, suppliers of merchandise and equipment can often furnish capital in the form of credit.

Some states also have organizations that provide aid to small businesses. California has several regional business development corporations that make long-term loans or offer loan guarantees for business expansion and the purchase of equipment.

In addition, some communities have local development companies that help small businesses find financing for offices or plant requirements. These agencies, which are organized and capitalized by community residents and encouraged by the federal government, can help arrange low interest loans from banks and the SBA or sometimes directly provide facilities to a small business.

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Selecting a Location

A choice of location is important to the success of the business and should enter early into the new business owner's plans. Site requirements will depend on the type of goods or services to be sold and the market that is sought. For instance, a manufacturing concern must consider proximity to suppliers and customers, available transportation, labor and utility costs, and state and local taxes and regulations. Some types of small business can be operated from the home depending on local zoning laws, but the majority cannot.

A retail store owner's primary concerns will be local traffic patterns, parking availability, population trends, and neighboring businesses and institutions. All prospective owners should outline their needs—present and future—and then find a location that suits their requirements.

The manufacturer may buy an existing building or construct a new one. Leasing is often an attractive alternative, however, and the most common procedure for retail and service establishments. A lawyer and an insurance agent should review any lease agreement carefully, noting what it says—and what it does not say. Some questions they will ask are:

☐ How is rent determined? Flat rate? Percentage of lease (monthly minimum plus a percentage of sales)?

☐ Is the rental high or low in relation to the area, the facilities being rented, and the percentage paid by other similar firms?

☐ Who is responsible for alterations—the landlord or the tenant?

☐ Who owns any improvements made by the tenant?

☐ How much insurance does the landlord hold? Is the tenant required to have certain coverage?

☐ What are the lease renewal provisions?

☐ Does the tenant have the right to sublet?

☐ Are there any options for expansion?

☐ Are there any restrictions on the property's use?

The decision to build or extensively renovate an existing structure will require compliance with regulations regarding building permits, zoning, and environmental impact.

Obtaining Licenses

The proprietor of a new business must obtain various licenses and permits before opening for business. The prospective business owner should contact the city or county licensing bureau for specific information.

Federal Regulations

In general, businesses that engage in interstate co merce will be subject to federal regulation. Als federal permits or licenses are required for any enterprise involving use of government property, preparation of meat products for transportation or sale, operation of common carriers, construction of a radio or TV station, production of drugs or biological products, operation of an investment advisory service, and others.

State Regulations

Occupational Licensing. The Department of Consumer Affairs is the umbrella licensing agency for more than 100 occupations in California. Each occupational board within the agency grants licenses according to standards of professionalism and ability. Licenses are granted for a specific term—usually one or two years—and must be renewed periodically.

The department is sensitive to consumer concerns and investigates complaints of licensing violations, unfair competition, and defective products or services. New owners should contact the Department of Consumer Affairs for licensing requirements.

Many occupations not regulated by the Department of Consumer Affairs are governed by independent departments. Real estate, banking, savings and lo associations, and insurance firms are regulated separate departments within the State Busines Transportation and Housing Agency. Licenses for the sale of liquor fall under the jurisdiction of one of these departments, the Alcoholic Beverage Control. The applicant files with the commissioner of the appropriate agency.

Corporation Filing Requirements. The California Corporation Code requires every corporation to file an annual statement with the Secretary of State identifying the directors of the corporation and their addresses, the names and addresses of certain officers, the address of the corporation's principal executive office (the address of the principal business office in California if the principal executive office is not in the state), and the general type of business. The statement must also designate an agent within the state. If the agent or the agent's address is changed during the year, the corporation must file a new statement. If there has been no change in the corporation's officers from the year before, this can simply be indicated on the annual statement. Filing fee is $5. The purpose of the statute is to identify the corporation for any legal proceedings that may be taken against the business.

Employee Relations. The Department of Industrial Relations enforces labor and industrial safety laws in the state of California. The business owr should check with the department to be certain t

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ompany is conforming to its wage, contract, and safety requirements. Other safety regulations may concern the U.S. Department of Labor's Occupational Safety and Health Administration.

Both federal and state laws stipulate minimum wage requirements: lawbreakers are penalized.

Fictitious Trade Name Registration. Often the name of an enterprise varies from the corporate name, does not include the surnames of all owners, or implies the existence of additional owners. In such cases, state law requires that the firm's fictitious name be registered with the county clerk within 30 days after opening. The registration fee is $10. Within 30 days of this registration, notice of the fictitious trade name must be published in a general circulation newspaper in the county where the business is located. An affidavit affirming such publication must be filed within the next 30 days at the county clerk's office. (Most newspapers will handle this formality.)

Local Regulations

Business License. In cities and counties where a business license is required, the business owner ould contact city hall or the county clerk's office specific local requirements. The business license ust be displayed where the public can see it.

Conditional Use Permit. In many California communities, prospective retailers may be required to apply for a conditional use permit from the local planning department. When outlining their businesses, owners should contact the local planning department to determine if such a permit is required.

The proposed business will be evaluated on a number of factors, including: the proposed sale of alcoholic beverages: the business's environmental impact: its conformance to area zoning regulations: and the suitability of the type of business to the neighborhood. As part of its evaluation, the department will conduct a hearing: if significant protests are expressed, approval may be refused.

Building Permit. Business owners planning to build or to remodel may need to obtain a building permit. Building codes vary throughout California, but most include such requirements as conformance to earthquake standards and a means of access for the handicapped.

In addition, permits may be required by local health, ire, or police departments for any activity that could a hazard to the community. The city council or l planning agency can help in describing area requirements and mapping development prospects for the community.

Self-Regulation

Within the business community, issues of social responsibility become targets for government regulation *if* no self-regulation exists. Every business owner must keep up with contemporary issues such as consumer protection, pollution, and fair hiring practices. Even the smallest firm is open to charges of discrimination in hiring, for example, or failing to dispose of its wastes properly.

Paying Taxes

The tax liability of a business is affected not only by its legal form, but by numerous other management decisions as well. The business owner should have an accountant or tax attorney explain how various methods of accounting, depreciation schedules for property, and the timing of business transactions affect tax figures. *Tax Guide for Small Business* (IRS Publication 334) is also helpful.

Income Taxes

Federal Taxes. For the sole proprietor, filing income tax returns is relatively uncomplicated. The business owner lists all business income and deductions on an individual income tax return, Form 1040 (Schedule C). Declarations and payments of estimated tax may also be required during the tax year.

A partnership's income is taxed as personal income to the partners, and each partner's distributive share is reported on his or her individual tax return. The partnership itself is not a taxable entity. However, its income must be determined and filed for information purposes under federal law. Form 1065 is used for the federal information return.

Income and deductions of a corporation are computed at the corporate level and taxes are paid on the corporation's taxable income. Any after-tax earnings of the corporation that are distributed to the shareholders as dividends will be taxed at the shareholder level. Most corporations file their income tax returns on Form 1120. Estimated tax payments may be required. Form 1120-W details instructions on computing and making these payments. Subchapter S corporations use Form 1120S to file their tax returns.

State Taxes. In general, California corporations are subject to a state franchise tax. The tax is imposed in advance for the privilege of exercising the corporate franchise. Most beginning corporations pay the $200 annual minimum franchise tax at the date of incorporation. Thereafter, the corporation must pay a tax based on net income for the preceding year or a minimum tax of $200, whichever is greater. Estimated tax payments may be required. The Franchise Tax Board sends its *Guide for Corporations Com-*

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mencing Business in California (FTB 1060) to new corporations upon request.

The sole proprietor also pays state income tax to the Franchise Tax Board. Estimated tax payments may be required. A partnership files an information return on Form 565.

Employment Taxes

Federal Taxes. Generally, the law requires every business with one or more employees to withhold federal income and Social Security taxes from wages paid.

The first step for an employer is to obtain an **employer's identification number**, required on employment tax returns, by filing Form SS-4 with the employer's regional Internal Revenue Service Center. This identification number is not the same as the Social Security number required on individual income tax returns. At the time of application, the business owner should request a copy of Circular E, *Employer's Tax Guide* (IRS Publication 15), which provides tax information pertinent to all employers. District offices of the IRS are open year-round for additional inquiries.

An employer should furnish every employee with a Form W-4, the Employee's Withholding Exemption Certificate, when hiring new employees or when the employee's number of exemptions changes. The exemption information in the *Employer's Tax Guide* will indicate the minimum amount to withhold from every paycheck. The employer will usually be required to file a quarterly return on Form 941.

Employees' Social Security taxes are withheld and matched in amount by their employers. Sole proprietors and partners pay a self-employment tax in lieu of Social Security for themselves.

Generally, an employer who pays wages of $1,500 or more in any quarter of the current or preceding year, or who has one or more employees for some portion of at least one day during each of 20 different calendar weeks within the current or preceding year, is subject to the Federal Unemployment Tax (FUTA). The employer's tax rate is a percentage of the first $7,000 of the employee's wages. The annual return is filed on Form 940 and quarterly deposits may be required.

State Taxes. California requires that state taxes be witheld from most employee paychecks and remitted to the Employment Development Department. With some exceptions, California law also requires that wages be paid at least twice monthly.

Most states, including California, have their own unemployment benefits. Every employer having one or more employees and paying more than $100 in wages in any quarter is subject to the law and responsible for registering with the state's Employment Development Department.

The employer pays the unemployment tax, which goes to the state fund for the eligible unemployed. Contributions to the state unemployment fund decrease federal unemployment tax liability. Disability insurance, which compensates an employee disabled by sickness or injury unrelated to the job, is deducted from the employee's paycheck. Disability insurance may be covered by a voluntary private program when the terms of coverage meet standards set by the Employment Development Department. Usually only larger businesses take advantage of this provision. Generally, employers withholding personal income tax or disability insurance contributions will be required to file periodic returns and remit the funds withheld to the Employment Development Department. Employers should contact the department for specific requirements.

Investment Tax Credit

One of the federal income tax provisions important to new businesses is the investment tax credit allowed for qualified investment in certain types of new and used equipment. The provision allows the business owner to take a tax credit of up to 10 percent of the amount of the qualified investment in new proper and up to 10 percent of the first $125,000 invested in used property. The credit applies only to certain property, and the property must have a useful life of at least three years to be eligible for any portion of the credit.

Rehabilitation Expenditures Credit

Expenditures on the rehabilitation of buildings in use for a specified period that have not been rehabilitated during that period may qualify for a tax credit if the rehabilitation expenditure is at least $5,000 and if the structure is used for business or commercial activities after rehabilitation. The tax credit is 15 percent of the qualified investment in a structure that is at least 30 years old; 20 percent of the investment in a structure that is at least 40 years old; and 25 percent for certified historical structures if approved for rehabilitation by the U.S. Secretary of the Interior.

Business Energy Investment Credit

Businesses are allowed to claim a tax credit of 10 to 15 percent (depending on the classification of the property) on qualified investment in energy property. Qualifying property includes solar, wind, or geothermal energy property, biomass property, and specially defined energy property. The business energy investment credit is determined separately from the regular investment tax credit.

Business owners should consult an accountant, tax attorney, or the Internal Revenue Service for more information about tax credits.

Excise Taxes

Federal excise taxes are imposed on the sale or use of certain items, on certain transactions, and on certain occupations. There are manufacturer's excise taxes on trucks and equipment, for instance, and on petroleum products and firearms. If a business involves liquor, gambling, or firearms, it may be subject to an occupational excise tax.

The excise tax affecting the largest number of small businesses is probably the highway use tax, levied on certain motor vehicles (of minimum weight standards) that operate on the public roads.

Excise taxes are due without assessment or notice; the prospective business owner should check with an IRS office to determine any specialized taxes to which the business may be subject.

Sales and Use Taxes

Under the California Sales and Use Tax Law, a retail business operator who holds a valid seller's permit has the right to buy tangible personal property for sale without paying sales or use tax to the vendor. register as a seller, the proprietor, general partner, or officer of a company must obtain a **seller's permit number** from the State Board of Equalization and must remit taxes collected from the consumer to the board. The board may require that the new business post a security deposit for the 6 percent sales tax due (6½ percent in San Francisco, Alameda, Contra Costa, Santa Clara, San Mateo, Los Angeles, and Santa Cruz counties). Many merchants post a certificate of deposit (CD) they have purchased from a bank or lending institution and collect interest. Business owners can obtain a seller's permit from any of the board's local offices.

The manufacturer or wholesaler who sells tangible property that will, in turn, be resold to the retail customer should obtain a completed **resale certificate** from the purchaser. The certificate should include the name and address of the purchaser, a statement that the property purchased is for resale, and the seller's permit number and signature of the purchaser. The seller's permit must be posted where visible to customers and suppliers.

A use tax is levied when the sales tax is not applicable and when the goods are used, stored, or consumed in California instead of being resold.

ditional information and copies of sales and use regulations that pertain to particular types of businesses may be obtained from any office of the California State Board of Equalization.

Property Taxes

Generally, all businesses must pay personal property taxes once a year, taxes becoming delinquent after August 31. Tax is on all tangible personal property (except inventory), including office furniture, supplies, certain leasehold improvements, equipment, tools, molds, and dies.

In California, businesses owning taxable personal property with a cost of $30,000 or more are responsible for filing a signed property statement with the county assessor, whether or not a request is received to do so.

Real property taxes on land and buildings are paid to the county in two annual installments on November 1 and February 1. Payments are delinquent on December 10 and April 10, respectively.

Proposition 13, passed in 1978, amended the California Constitution to limit the rate of real property taxation to 1 percent of its full cash value (plus an amount to cover bonded indebtedness). Generally, the tax is determined by the county assessor's valuation as shown on the 1975-76 tax bill, unless there has been new construction or a change of ownership after the 1975 assessment. The full cash value base may be adjusted annually by up to 2 percent to reflect any inflation.

Setting Up the Books

As one business expert puts it, "If you don't understand the *need* for good records, you don't have enough experience to be starting a business." Indeed, keeping inadequate records is one of the most serious mistakes small business owners can make. Too often, new entrepreneurs think they must keep records only because it is required by the IRS. But accurate and complete financial records can help the owner monitor the business and make plans for the future based on financial knowledge rather than guesswork.

Every business should have up-to-date records that provide the following:

☐ Accurate and thorough statements of sales and operating results, fixed and variable costs, profit and loss, inventory levels, and credit and collection totals;

☐ Comparisons of current data with prior years' operating results and budgeted goals;

☐ Financial statements suitable for use by management or for submission to prospective creditors and investors;

☐ A method for uncovering employee theft, material waste, or record-keeping errors; and

☐ Tax returns and reports to regulatory agencies.

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A knowledgeable accountant can help set up an appropriate system. Suppliers and trade associations often can provide guidelines or simple accounting records tailored to a particular industry. Essential records in any accounting system include:

☐ A daily summary of cash receipts, taken from sales receipts, register tapes, or charge slips;

☐ An expense ledger, tallying both cash and checks disbursed for expenses such as rent, payroll, and accounts payable;

☐ An inventory purchase journal showing shipments received, accounts payable, and cash available for future purchases;

☐ An employee compensation record listing hours, pay, and withheld deductions for both part-time and full-time workers; and

☐ An accounts receivable record for credit sales.

As additional bookkeeping safeguards, experts recommend that receipts be retained for all business expenses and that personal and business bank accounts be kept separate. Some owners also find that auxiliary accounts reserved for taxes ensure that sufficient cash is on hand when tax due dates arrive.

Daily income and expense data should be posted monthly in a permanent ledger for periodic use by an accountant in preparing an income statement and balance sheet.

The **income statement**—or the profit and loss statement, as it is often called—portrays the financial health of an operation over a given period, tells whether the business is reaching sales and profit goals, and provides the final word on success or failure in dollars and cents. Owners prepare statements monthly, quarterly, or annually.

No two profit and loss statements are exactly alike, but by averaging the number of statements in the same line of business, analysts put together percentages that correspond to the income statement and call the results **operating ratios**.

The **balance sheet** takes stock of the business's financial standing on a given date, usually each (fiscal) year's end. By weighing the business's assets against its liabilities—what is owned versus what is owed—the owner can derive net worth (equity) and calculate a debt-to-net-worth ratio. When compared to published industry statistics, these figures and percentages help the owner assess the firm's progress against others in the field and indicate its relative strength or weakness.

Owner's salary should be subtracted from gross profit along with other operating expenses—rather than taken from net profit—in order to avoid distortion of a true profit reading.

Insuring the Business

Before opening the business, the prospective owner should consult an insurance agent or broker so a comprehensive insurance plan can be designed to meet the operation's specific needs. A basic package can include the following types of protection:

Fire insurance, covering damage to the premises, equipment, and inventory caused by fire, explosion, wind, riot, or smoke.

Liability insurance, protecting the firm from financial loss due to any claims of bodily injury or property damage in connection with business operations.

Crime coverage, reimbursing for losses due to robbery, burglary, employee dishonesty, or vandalism.

Automobile insurance, encompassing both physical damage and liability coverage for company-owned vehicles or vehicles used for business purposes.

Workers' compensation insurance, mandatory in California, covering injuries and loss of pay related to employee accidents on the job.

Fidelity bonds, placed on employees with access to cash receipts and other company funds, guaranteeing against financial loss from embezzlement.

Business interruption insurance, compensating for revenue lost during a temporary halt in business caused by fire, theft, or illness.

Employee health and life insurance, providing workers and dependents with financial benefits in case of illness or death. If a staff is too small to qualify for group benefit policies, an owner can take out individual policies for each. Employers are usually required to set aside benefit funds for workers who belong to labor unions.

"Key person" insurance, compensating the business when any partners or persons essential to managing the operation become disabled or die.

Product liability insurance, protecting the business from claims against defective merchandise.

A package policy that includes all basic coverage may be the most economical form of insurance. To get the best rates, the business manager should shop around before deciding on which plan (or plans) to purchase. Trade associations often offer special rates and policies to their members.

Promoting the Business

When a new business opens, the owner must be prepared to publicize the venture or its chances for success will be slim. Only a few firms—such as those with a prime location, nationally known name, or built-in clientele—can succeed without advertising to promote market awareness and stimulate sales.

Small business owners are advised to make advertising costs a permanent part of their business budget, allocating monthly amounts according to the changing needs of their operations. Too many small business managers, feeling overshadowed by the larger firms, decide that they cannot compete with firms budgeting for million-dollar advertising expenditures. Thus, their advertising dollars are spent erratically and their "hit or miss" efforts often bring disappointing results.

The new business operator should assess the firm's products or services and target market(s). With these business and customer profiles in hand, the entrepreneur can establish some advertising goals and a budget, then select the most cost-effective ad media for the particular operation. Advertisers can use several criteria on which to judge the media best suited for their business needs.

Trading Area. A neighborhood dress shop and a manufacturer of pollution control devices have vastly different sales territories. The retailer is likely to use ch local media as daily or weekly newspapers, oppers, flyers or leaflets, in-store displays, or radio, while the manufacturer concentrates on industrial directories, business magazines, and trade show displays. Both firms might find direct mail an appropriate medium for reaching prospective customers.

Customer Type. A nursery might try to reach home gardeners by advertising in special interest magazines; a motel could address people on the move through outdoor signs, travel guides, and tourist publications; while a shoe store might lend merchandise to a nearby apparel shop for use in a window display.

Budget Restrictions. Many small businesses cannot afford to buy expensive TV air time, ads in large metropolitan daily newspapers, or spots on popular urban radio stations. For those on shoestring budgets, personal civic activities—sponsoring a local sports group or donating goods to charitable events—can be effective, yet inexpensive, ways of promoting the business. Business managers should also look into cooperative advertising where manufacturers share advertising costs with the distributor or retailer.

quency and Continuity. Advertising for a toy iness would naturally be heaviest near the Christmas season, while a pest control service advertises at the same level year round.

Whatever the media used by the advertiser, the firm's name should appear prominently in the ad message, and a company logo, slogan, or musical theme can reinforce the intended image. Used consistently, a distinctive advertising symbol or approach will gain greater recognition for the advertiser than will ads that look or sound different each time they appear.

Though most small business owners prepare their own ads, helpful services are available. Most media supply marketing data; print shops help in design and layout; suppliers may provide advertising funds or finished ads for use by local retailers. For those who can afford it, advertising agencies specializing in small business accounts can do the whole job.

In addition, small business owners should not overlook the value of effective public relations. Such basics as good service, courtesy, and community involvement go a long way toward encouraging good will and building a clientele.

Managing the Business

The art of managing a business is encyclopedic and may be gained only through experience. But as the prime mover in the business, the new owner must offer direction and control of the entire operation.

Too often, small business managers tend to run with the drift of things. They get by from crisis to crisis, or event to event, with no active intervention or attempt to plan operations with purpose. In effect, they let their businesses run *them*.

Management involves the creative manipulation of events and people to produce profits, future as well as current. The manager must constantly work with pencil and paper, plotting out the use of money, materials, and manpower to maximize efficiency. *Measurable* objectives must be set. "Increasing sales" is a vague and useless objective. "Increasing sales by 5 to 15 percent within a year, while maintaining a 20 percent net profit" is precise and testable. Changes in the business and environment that surrounds it will occur, of course; sound planning includes allowance for modifying objectives.

A timetable must be developed—*when* raw materials or merchandise must be on hand, *when* new inventory should be ordered, *when* orders must go out, *when* to expand operations. And a system of organization must be established whereby authority is delegated in a stable and continuing pattern. The development of an overall business strategy requires the marshalling of all resources that constitute a business into an efficient, competitive unit.

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Quiz for Prospective Business Owners

These questions should make you think about yourself, about what you need to know to go into your own business. Depending on the type of business, one question will have more weight than another. Thus, a certain number of "Yes" answers would not definitely indicate that you're ready to enter your own business. But if any of the questions cause you to prepare yourself more thoroughly, your time will have been well spent.

YES NO

Personal Considerations

☐ ☐ I like to make my own decisions and try my own ideas.

☐ ☐ I enjoy being challenged and thrive on competition.

☐ ☐ Common sense is one of my strong points.

☐ ☐ I have willpower and self-discipline. I get things done on time and plan ahead.

☐ ☐ I like to work and understand that my own business will require me to work harder and longer—12 to 16 hours a day, probably six days a week, maybe even on holidays.

☐ ☐ I have the energy to do all the work involved—lifting, hauling, working in a shop, standing, walking, talking, smiling, driving—that the day-to-day operation of this business will call for.

☐ ☐ I realize I can't be all things to all people at all times but that this will be expected of me in my own firm. I can withstand the strain this will create for me.

☐ ☐ I don't know everything. There are still things to learn—new ideas for me to consider. I can take advice from others.

☐ ☐ I am adaptable. I'm not so routine-bound or rigid that I can't change if the business requires change.

YES NO

Financial Considerations

☐ ☐ I have a head for figures and have looked into my own—and the proposed business's—financial picture thoroughly, preparing all the necessary statements and projections with the help of my accountant, who will inform me of my financial progress.

☐ ☐ I have enough money to go into business and can get more from other sources—friends, family, life insurance company. My banker stands ready to give me counseling and advice.

☐ ☐ I know that my standard of living will be lowered for several months—even a year or two—until the business begins to show a profit.

☐ ☐ I know that I must repay my loan out of after-tax profits before I can see a return on my investment.

☐ ☐ I know that it is possible for me to lose my savings—as well as the money I borrow from others—and that even if the business fails, I must pay back all I owe.

☐ ☐ I have always protected myself, my family, and possessions with insurance and will continue to do so. My insurance agent will help me select the best protection for the business.

YES NO

Marketing Considerations

☐ ☐ I know that my community wants, needs, and can support this business and that there are enough people with sufficient inclination to spend money for the goods or services I plan to supply.

☐ ☐ I have studied the strengths and weaknesses of my competition and I know the marketable differences in my product or service.

YES NO

☐ ☐ I know how to go about finding the right location for my business and will select the site only after thorough research.

☐ ☐ I have given a good deal of thought to how and where I can best advertise and promote my merchandise or services.

☐ ☐ I know how to display, package, or present my services or merchandise.

Management Considerations

☐ ☐ I realize that about 90 percent of business failures are caused by inexperience and poor management. I have several years' experience in this or a related business.

☐ ☐ I know the methods a good manager can follow to improve a business and also the mistakes that can drive business away.

☐ ☐ I am familiar with and know how to keep inventory records, record and report sales, withhold taxes for the government, and make out official employee and business records and forms.

☐ ☐ I know that the employees are the vital link between the business and its smooth operation. My experience or education has prepared me for maintaining positive relationships with employees while obtaining results.

☐ ☐ I know how to develop an assistant or "backup" person to run the business when I am not there.

☐ ☐ I know what the trade association expects of me and what to expect of it.

☐ ☐ I can make my place of business effective and attractive—and stay within the budget.

YES NO

☐ ☐ I know the suppliers and the assistance they can provide.

☐ ☐ I know how to forecast sales and expenses and how to use this information to help my business become successful.

☐ ☐ I know how to price my goods or services competitively, meet expenses, make the payroll, and turn a profit.

☐ ☐ I know how to control my inventory or production to coincide with peak and slack periods in the business.

☐ ☐ I know how to collect past due accounts without losing customers.

☐ ☐ I know how to analyze financial operating statements and can use these as a tool for effective business management.

Final Considerations

☐ ☐ I am aware of the advantages of working for someone else rather than going into business for myself and have considered all the alternatives to entering business on my own.

☐ ☐ I have investigated the possibility of a franchise operation and know the advantages there might be to a franchising agreement.

☐ ☐ I know the advantages—and disadvantages—inherent in a sole proprietorship, partnership, and corporation and know which form of business organization I will select. My attorney will help.

☐ ☐ I am aware that I may fail. There is less than a 50-50 chance that I will still be in business two years from now, but it is worth it to me to try.

PROFESSIONAL ASSISTANCE AVAILABLE

Adviser	Type of Assistance	How to Find It
Accountant	Can set up a pattern of bookkeeping that is easy for the owner to follow daily and for the accountant to work with at audit or tax time. Helps set up systems for the control of cash and handling of funds, and can suggest simple equipment like cash registers, multiple copy sales checks, and other forms.	Bankers and lawyers often know accountants who are willing to work with small businesses. Accountants are listed in the Yellow Pages. The entrepreneur should confer with several accountants and check their experience and references before deciding on one. Fees are often based on hourly rates and vary with the complexity and extent of the service. Fees should be negotiated in advance.
Attorney	Can help in choosing a form of business; drawing up partnership and incorporating agreements; making sure papers are properly filed with city, county, and state governments; interpreting contracts and leases; arbitrating disputes within the business and for the business against others; and in consulting when the business owner is unsure of legal rights and obligations.	Lawyers may be located through friends, other business owners, suppliers, consultants, trade associations, or through listings in the Yellow Pages. In most counties, local bar association referral services can arrange for a business person in need of legal counsel to meet with a practicing attorney in the area. The initial consultation implies no further obligation.
Banker	Can set up the business's checking and savings accounts, provide loans, and offer financial guidance. In addition, some banks offer computerized accounting services, investment and trust management services, pension and profit-sharing plans, and MasterCard® and VISA® credit card merchant memberships.	A banker might be contacted where the bu ness owner has a personal bank account o near the business location for convenience. The business owner should choose a bank that offers a full range of services that the business will need as it grows. It is important to establish a continuing relationship with the banker and to keep the banker informed of the progress of the business.
Insurance Agent or Broker	Will evaluate insurance needs and set up packages to cover specific types of businesses. May be either an independent (dealing with several insurance companies) or a direct writer (employed by and writing policies for one company).	The business operator should talk with several agents, compare the coverage and costs of the insurance they offer, and select the program best suited to the company's needs—comprehensively and economically. Agents require complete data on business operations and must be continuously apprised of changes affecting insurance coverage. Agents and brokers are listed in the Yellow Pages.
Management and Marketing Consultant	If specializing in small business, can help new business people determine and juggle the many facets of starting: product determination, advertising, inventory, security, filing, hiring, pricing—hidden details that a new entrepreneur may not think of. Has access to other sources of information and contacts with lawyers, accountants, and advertising agencies.	Consultants are listed in the Yellow Pages and can be found by talking to friends and others in the business. (Consultants generally charge on an hourly, daily, or weekly basis—or on a monthly "retainer.") In addition, the Small Business Administration has its own SCORE (Service Corps of Retired Executiv volunteers who counsel business owners f of charge.

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PERSONAL FINANCIAL STATEMENT

________ ______, 19______

Assets

Cash $__________

Savings accounts __________

Stocks, bonds, other securities __________

Accounts/Notes receivable __________

Life insurance cash value __________

Rebates/Refunds __________

Autos/Other vehicles __________

Real estate __________

Vested pension plan/Retirement accounts __________

Other assets __________

TOTAL ASSETS $__________

Liabilities

Accounts payable $__________

Contracts payable __________

Notes payable __________

Taxes payable __________

Real estate loans __________

Other liabilities __________

TOTAL LIABILITIES $__________

TOTAL ASSETS $__________

LESS TOTAL LIABILITIES –$__________

NET WORTH $__________

COST-OF-LIVING BUDGET*

Regular Monthly Payments

Rent or mortgage (including taxes) $__________

Cars (including insurance) __________

Appliances/TV __________

Home improvement loan __________

Personal loan __________

Health plan __________

Life insurance premiums __________

Other insurance premiums __________

Miscellaneous __________

TOTAL $__________

Household Operating Expenses

Telephone $__________

Gas and electricity __________

Water and garbage __________

Other household expenses, repairs, maintenance __________

TOTAL $__________

Food Expenses

Food—at home $__________

Food—away from home __________

TOTAL $__________

Personal Expenses

Clothing, cleaning, laundry $__________

Drugs __________

Doctors and dentists __________

Education __________

Dues __________

Gifts and contributions __________

Travel __________

Newspapers, magazines, books __________

Auto upkeep, gas, and parking __________

Spending money, allowances __________

TOTAL $__________

Tax Expenses

Federal and state income taxes $__________

Personal property taxes __________

Other taxes __________

TOTAL $__________

BUDGET SUMMARY

Regular Monthly Payments $__________

Household Operating Expenses __________

Food Expenses __________

Personal Expenses __________

Tax Expenses __________

MONTHLY TOTAL $__________

**This budget is based on an average month. It does not cover the purchase of any new items except emergency replacements.*

MONEY NEEDS FOR FIRST THREE MONTHS

Living Expenses	From last paycheck to opening day	$ ________
	Moving expense	________
	For three months after opening day (from cost-of-living budget)	________
Deposits, Prepayments, Licenses	Last month's business rent (first three months in operating expenses below)	________
	Telephone and utility deposits	________
	Sales tax deposit	________
	Business licenses	________
	Insurance premiums	________
Leasehold Improvements	Remodeling and redecorating	________
	Fixtures, equipment, displays	________
	Installation labor	________
	Signs—outside and inside	________
Inventory	Service, delivery equipment, and supplies	________
	Merchandise (approximately 65% of this amount to be invested in opening stock)	________
Total Operating Expenses for Three Months (from Projected Profit and Loss Statement, page 18)		________
Reserve to Carry Customers' Accounts		
Cash for Petty Cash, Change, etc.		________
	TOTAL	$ ________

Money for living and business expenses for at least three months should be set aside in a bank savings account and should not be used for any other purpose. This is a "cush- [illegible]" to help get through the starting period with a minimum [illegible] orry. If expense money for a longer period can be p[illegible]ded, it will add to peace of mind and help the entre- p[illegible]ur concentrate on building the business.

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PROJECTED PROFIT AND LOSS STATEMENT

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
Total Net Sales													
Cost of Sales													
GROSS PROFIT													
Controllable Expenses Salaries													
Payroll taxes													
Security													
Advertising													
Automobile													
Dues and subscriptions													
Legal and accounting													
Office supplies													
Telephone													
Utilities													
Miscellaneous													
Total Controllable Expenses													
Fixed Expenses Depreciation													
Insurance													
Rent													
Taxes and licenses													
Loan payments (interest)													
Total Fixed Expenses													
TOTAL EXPENSES													
NET PROFIT (LOSS) (before taxes)													

CASH FLOW PROJECTIONS

	Start-up or prior to loan	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
Cash (beginning of month) Cash on hand														
Cash in bank														
Cash in investments														
Total Cash														
Income (during month) Cash sales														
Credit sales payments														
Investment income														
Loans														
Other cash income														
Total Income														
TOTAL CASH AND INCOME														
Expenses (during month) Inventory or new material														
Wages (including owner's)														
Taxes														
Equipment expense														
Overhead														
Selling expense														
Transportation														
Loan repayment (principal)														
Other cash expenses														
TOTAL EXPENSES														
CASH FLOW EXCESS (end of month)														
CASH FLOW CUMULATIVE (monthly)														

BALANCE SHEET

__________ ______, 19_____

	YEAR I	YEAR II
Current Assets		
Cash	$ __________	$ __________
Accounts receivable	__________	__________
Inventory	__________	__________
Fixed Assets		
Real estate	__________	__________
Fixtures and equipment	__________	__________
Vehicles	__________	__________
Other Assets		
License	__________	__________
Goodwill	__________	__________
TOTAL ASSETS	$ __________	$ __________
Current Liabilities		
Notes payable (due within one year)	$ __________	$ __________
Accounts payable	__________	__________
Accrued expenses	__________	__________
Taxes owed	__________	__________
Long-Term Liabilities		
Notes payable (due after one year)	__________	__________
Other	__________	__________
TOTAL LIABILITIES	$ __________	$ __________
NET WORTH (ASSETS minus LIABILITIES)	$ __________	$ __________

TOTAL LIABILITIES plus NET WORTH should equal ASSETS

Sources of Further Information

Government Agencies and Publications

Where no specific publications are listed, contact the relevant agency for available information.

Internal Revenue Service
Washington, DC 20224
(202) 566-5000

Small Business Administration
1441 L Street, N.W.
Washington, DC 20416
(202) 653-6365
(800) 368-5855

District Offices:

350 South Figueroa Street, 6th Floor
Los Angeles, CA 90071
(213) 688-2956

211 Main Street, 4th Floor
San Francisco, CA 94105
(415) 974-0649

U.S. Department of Commerce
14th and Constitution Avenues, N.W.
Washington, DC 20230
(202) 377-5494

U.S. Government Printing Office
Superintendent of Documents
Washington, DC 20402
02) 783-3238

nthly Catalog of United States
ernment Publications

Commission for Economic Development
107 S. Broadway
Los Angeles, CA 90012
(213) 620-2560

Doing Business in California

Department of Economic and Business Development
Office of Small Business Development
1030 13th Street, Suite 200
Sacramento, CA 95814
(916) 445-6545

A Guide to Starting a Business,
Buying a Business,
Financing a Business

California License Handbook

Department of Industrial Relations
525 Golden Gate Avenue
San Francisco, CA 94102
(415) 557-2810

Employment Development Department
800 Capitol Mall
Sacramento, CA 95814
(916) 445-8008

Franchise Tax Board
Sacramento, CA 95867
16) 355-0370

Secretary of State
1230 J Street
Sacramento, CA 95814
(916) 445-0620

State Board of Equalization
1020 N Street
Sacramento, CA 95814
(916) 445-6464

Trade Associations

California Chamber of Commerce
P.O. Box 1736
Sacramento, CA 95808
(916) 444-6670

National Federation of Independent Business
150 West 20th Avenue
San Mateo, CA 94403
(415) 341-7441

National Small Business Association
1604 K Street, N.W.
Washington, DC 20006
(202) 293-8830

Periodicals

Annual Statement Studies
Robert Morris Associates
Credit Division
1616 Philadelphia National Bank Building
Philadelphia, PA 19107

Expenses in Retail Business
National Cash Register Company
Customer Support and Education—Special Orders
Dayton, OH 45479

Key Business Ratios
Dun & Bradstreet, Inc.
Business Economics Division
99 Church Street
New York, NY 10007

Books

Business Information Sources
by Lorna M. Daniells
University of California Press
Berkeley, CA, 1976

Business Loans: A Guide to Money Sources and How to Approach Them Successfully
by Rick Stephan Hayes
CBI Publishing Company, Inc.
Boston, MA, 1980

The Complete Information Bank
by Ron Christy and Billy Jones
Center for Entrepreneurship
College of Business Administration
Wichita State University
Wichita, KS, 1982

Creative Business Financing
by James G. Simmons
Prentice-Hall, Inc.
Englewood Cliffs, NJ, 1983

The Entrepreneur's Master Planning Guide
by John A. Welsh and Jerry F. White
Prentice-Hall, Inc.
Englewood Cliffs, NJ, 1983

How to Organize and Operate a Small Business
by P.C. Kelly, K. Lawyer, and C.M. Baumback
Prentice-Hall, Inc.
Englewood Cliffs, NJ, 1979

The Insider's Guide to Small Business Resources
by David E. Gumpert and Jeffrey A. Timmons
Doubleday
Garden City, NY, 1982

Personnel Management for the Small Company
by Linda A. Roxe
AMACOM
New York, NY, 1979

The Secrets of Practical Marketing for Small Business
by Herman R. Holtz
Prentice-Hall, Inc.
Englewood Cliffs, NJ, 1982

Simplified Accounting for Non-Accountants
by Rick Stephan Hayes and C. Richard Baker
John Wiley & Sons
New York, NY, 1982

Small Business Survival Guide
by Joseph R. Mancuso
Prentice-Hall, Inc.
Englewood Cliffs, NJ, 1980

Small-Time Operator
by Bernard Kamaroff
Bell Springs Publishing Company
Laytonville, CA, 1983

Taxation for Small Business
by M. J. Lane
John Wiley & Sons
New York, NY, 1982

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Bank of America

BANK OF AMERICA NT&SA • MEMBER FDIC • SBR-110 5-84 (REPRINT 9-88)

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ADDITIONAL ARTICLES/INFORMATION

TECHNOLOGY

Educating for Our Factories of the Future

Stuart A. Rosenfeld

> ". . . the automated workplace requires qualitatively different skills and behaviors."

Already replacing human labor in many factories, *automation — machinery and management systems controlled and integrated by computers — is on the verge of reshaping the workplace.*

Firms using new technologies want a different type of worker and an education appropriate for the automated system. The spread of automation requires turning the most job-specific forms of education back to the company and concentrating in schools on broader skills and knowledge.

Different Skills and Behaviors

To better understand the effects of automation on work and their significance for education, the Southern Technology Council, formed by the governors of 12 Southern states to address issues of science and technology, conducted a study of manufacturers in the rural South. A questionnaire sent to businesses sought information about factors affecting decisions to automate and about changes in the workplace resulting from such shifts. Follow-up case studies were conducted in eight of the sites, including two Japanese-affiliated companies.

The study found that the impact of automation for workers cannot be discussed simply in terms of their needing fewer — or more — skills. Automation does simplify some functions and add complexity to others. *But more important, the automated workplace requires qualitatively different skills and behaviors.*

A common mistake is to view automated processes merely as new ways to alter the form of matter. "Hard" technology is not the only important addition to the workplace. In fact, new skills are more apt to be attributable to "soft" technologies, i.e., innovations in organizing and managing business, often influenced by the success of Japanese manufacturing and global competition. Examples include "just in time" inventory methods for reducing the need to maintain stock, statistical process control for sampling products and understanding variations in quality, participatory management, and customized production.

The need for new skills, the study found, arises from a variety of technological factors. First, businesses are seeking greater flexibility as they move toward customized manufacturing. Whereas the most progressive manufacturers once aimed for large production runs to achieve economies of scale and lower unit costs, their goal now is small runs to gain economies of scope and greater responsiveness to

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Stuart A. Rosenfeld is Director of the Southern Technology Council and Deputy Director of the Southern Growth Policies Board.

only 30 percent of those surveyed rated public schools as important factors in their decisions about automation.

Greater responsibilities for workers indicate the need for a less structured educational environment. For example, fewer job classifications in the factory ought to lead to fewer classifications of vocational programs. Schools must place more emphasis on the learning process and on leadership. Increased requirements in industry for math, English, and science suggest that high schools must devote more time to these disciplines. And the technical proficiency in manufacturing necessitates postsecondary vocational education.

Innovation is the key to the success of American industry. Yet too many high school graduates today are ill-equipped to function confidently in an automated workplace. Educating for the factory of the future will give technical graduates the opportunity to be innovators — to make increasingly effective use of technology, rather than merely react against it. ☐

THE CHANGING WORKPLACE...

"The key to productivity improvement for a high wage nation lies in the third industrial revolution now taking place in the world. The steam engine and the electric motor drove the first two industrial revolutions, causing profound changes in work organization, which boosted productivity, quality and living standards dramatically. The creation of the modern factory in the 1800's and mass production in the 1900's followed these technology breakthroughs.

The advent of the computer, high-speed communication and universal education are heralding a third industrial revolution. High performance work organizations are already unleashing new advances in productivity, quality, variety, and speed of new product introductions.

The organization of America's workplace today is largely modeled after the system of mass manufactures pioneered during the early 1900's. The premise is simple: break complex jobs down into a myriad of simple, rote tasks, so that any one can do them with machine-like efficiency.

The system is managed by a small group of educated planners and supervisors who do the thinking for the organization. They plan strategy, implement changes, motivate the workers and solve problems. Extensive administrative procedures allow managers to keep control of a large number of workers. Most employees under this model need not be educated. It is far more important that they be reliable, steady and wiling order-takers.

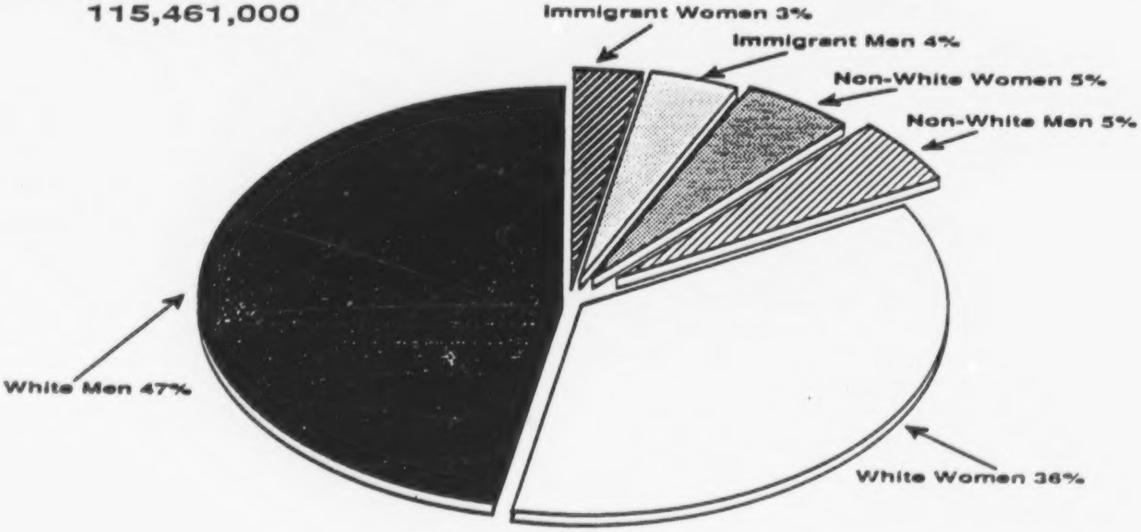
Today, as production processes become more complex, new product introductions more frequent, quality requirements increase and product variety proliferates, the mass-production system becomes inefficient. The administrative guidelines, work procedures and controls multiply until bureaueracy overwhelms quality and efficiency.

High-performance work organizations are replacing mass production in the world's best companies. The guiding principle is to reduce bureaueracy by giving autonomy to front-line workers. Workers are asked to use judgment and make decisions rather than follow, by rote, cumbersome procedures spelled out in detail. Management layers are disappearing as front-line workers take over many of the tasks--from quality control to production scheduling--that others used to do."

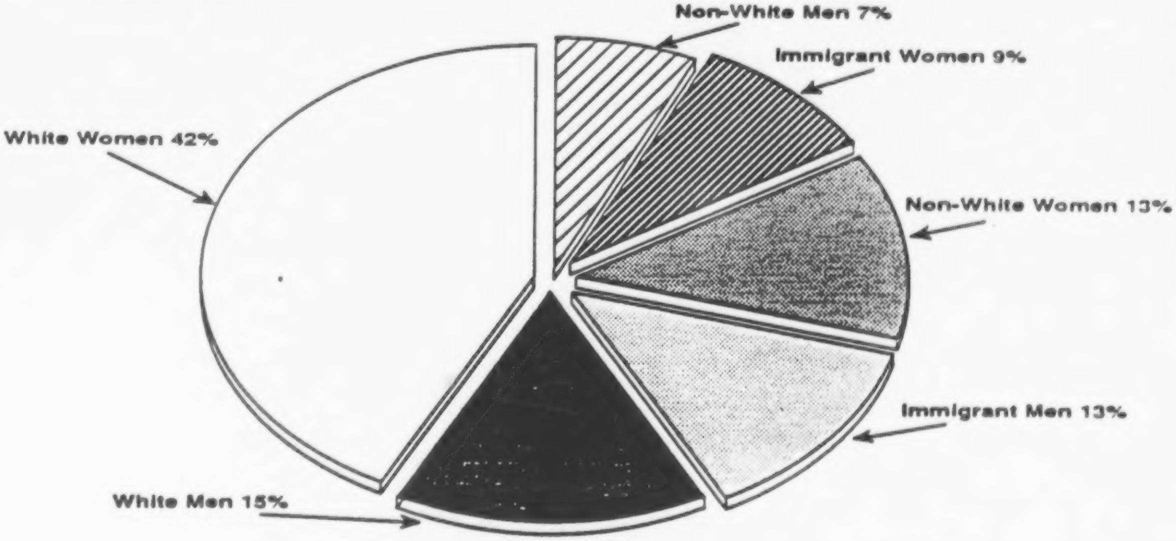
(Source: "The Status Quo is Not a Choice." Work America, August 1990, p. 1-7.)

Changing Labor Force

1985 LABOR FORCE
115,461,000



NET NEW WORKERS, 1985-2000
25,000,000



Changing demographics will markedly affect the composition of the future workforce. Of the net workers entering the labor force by the year 2000, only 15 percent will be white men, and the rest either white women, members of minority groups, or immigrants.

Source: U.S. Department of Labor

THE NEW, IMPROVED VOCATIONAL SCHOOL

Worried about a shortage of technicians? Can't find people who can communicate and solve problems? Alarmed about high school dropout rates? Here's hope.

■ *by Nancy J. Perry*

Experimenting with lasers: a vocational high school class in Lexington, Massachusetts

THE TEACHER CAPTIVATES the class as he paces back and forth, commenting, cracking jokes, asking questions. "Everybody loves a sincere speaker," says the wiry young instructor, immaculately dressed in tan pants, white shirt, and brown striped tie. "Have your facts straight. Don't go off on a tangent." In discussing the fear of public speaking, he suddenly yanks off his glasses, pretending that he can no longer see his audience, and says, "You folks look *scary* out there." The students guffaw. Now, choose one: You are in (a) a European business school, (b) an esteemed private college, (c) a corporate communications seminar.

Answer: a vocational high school. The teacher, Robert Moses, is an instructor at the Chicago High School for Agricultural Sciences, a "magnet" school set up to attract youngsters—87% of whom are black or Hispanic—from throughout the city. All carry a full academic load, including courses in a foreign language and computer technology, and 75% of the seniors have been accepted at four-year colleges. Dow Chemical has awarded scholarships and summer job guarantees to four of them. Why? Like most major corporations, Dow is looking for entry-level workers who can communicate, solve problems, work with technology, and learn quickly. Guess what? A new generation of vocational schools is beginning to turn them out.

In America vocational schools have long been written off as the ultimate oxymoron, emphasis on moron. Remember Bill Cosby's old routine on shop? In it he recalls, "A guy says, 'If you put a bullet in the furnace, it will explode.' This was the brightest kid in our class." No longer. Says John Furman, a training coordinator for General Motors: "I recently spoke to some vocational students who were using computers to simulate rocket launchings. It's not like in the Fifties, when they'd just be given a piece of wood to saw." Today some 26,000 public high schools, community colleges, and technical institutes offer vocational education. This story considers only publicly funded vocational education, not the myriad private training centers, which range from fly-by-night operations to Katharine Gibbs, a highly respected secretarial school.

For industry, vocational education could be a godsend. According to the Bureau of Labor Statistics, jobs for technicians will grow 38% by the year 2000—faster than any other major occupational group. As automation spreads, companies need smarter, more-flexible employees who can perform a variety of tasks, from installing and monitoring welding robots to reprogramming them if production rates drop. Professor Ernest Lynton at the University of Massachusetts dubs this new breed "blue-and-white-striped-collar workers"—production employees who are paid to think.

COMPANIES CANNOT train them all. Says Jack Bowsher, a retired director of IBM external education: "When someone comes to work here, we double the cost of training, because we have to pay salaries too. More and more, industry is asking: 'How do we get people trained *before* we

REPORTER ASSOCIATE *Cynthia Hutton*

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Former Toyota apprentice Kevin Spezzano now works in a Massachusetts dealership.

hire them?' Vocational schools do this.'

American corporations have an important reason to help make vocational education better—self-interest. By working with local institutions on curriculum, by lobbying state education departments and local school boards for funding, by donating up-to-date equipment, by loaning employees to serve as teachers and mentors, companies can help guarantee themselves a better-trained, more productive work force.

OVER THE PAST five years, General Dynamics has hired 40 machinists for its Pomona, California, division from nearby vocational schools. Most have since been promoted, a few to salaried supervisor. "We don't have to look for top-grade machinists anymore," says John Whiteside, a vice president of human resources. "We think this is the best way to go."

Toyota, too, is revved up about American vocational training. Forecasting a need for 7,000 more mechanics by 1995, the company gives tools, cars, trucks, and scholarships to 55 U.S. vocational schools and colleges. In the past three years Toyota has hired over 500 graduates to work in dealerships.

Modern vocational education does something at least as important as train labor: It helps keep youngsters in school. Though only half of those who enter high school go on to higher education, American schools persist in treating non-college-bound students like second-class citizens. So, many drop out. Quality vocational programs can motivate students to stay in school—and maybe even go to college—by making academics more palatable and by providing highly marketable skills.

The revolution in vocational schools is part of the broader educational reform movement. Under pressure from academic proponents who want to strengthen the liberal arts curriculum in high schools, at least 43 states in the past four years have reexamined their vocational education policies. The results: Schools are experimenting with new teaching methods that integrate basic academics and hands-on learning. They are offering broad clusters of courses such as health sciences or electronics, instead of occupationally specific programs like brake repair. And they are forming closer ties to businesses and community colleges so that students can easily make the transition to work or college. Says John Bishop, a professor at Cornell University's School of Industrial and Labor Relations: "I think vocational education is doing a better job of what it's trying to do than academic classes are doing."

As the demand for skilled workers grows, improving the system of technological training becomes good economic as well as social policy. The 1984 Carl D. Perkins Vocational Education Act, which provides roughly $1 billion a year to improve the quality of secondary and post-secondary schools, is up for reauthorization this year. New amendments in the House version would add $200 million to encourage high schools and community colleges to create coordinated programs of instruction. Dubbed "tech prep" or "2+2," these promising programs would link the last two years of high school with the first two years of college.

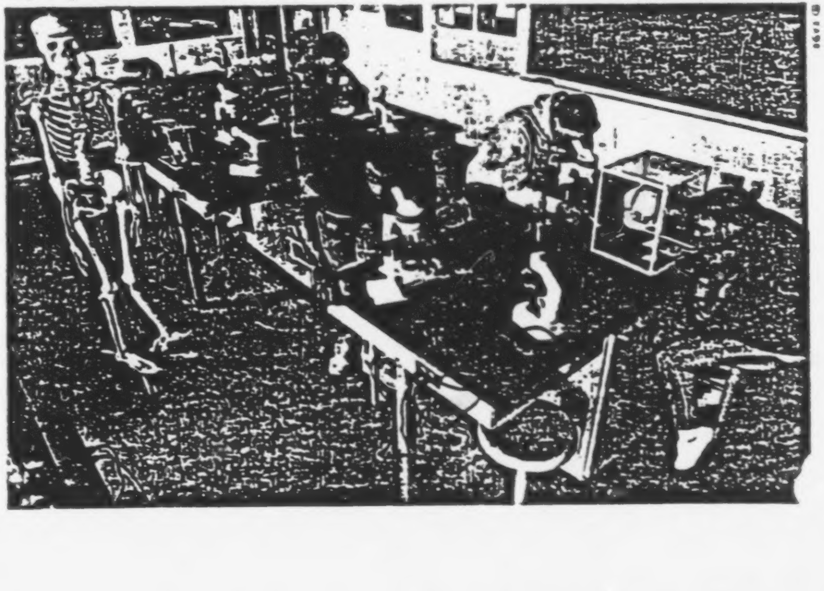
Though poor schools are still common here's what good vocational education can do:

■ **Make academics relevant.** Within the graffitied halls of ivy, a debate rages: Is job-specific training valuable for high school students, or are they better off learning basic sciences, languages, history, and math? The question assumes that job training and academics are mutually exclusive. They are not. To the contrary, many people learn academic subjects better in a context they can understand. Says Joyce Schroeder, who teaches applied math to carpentry students at the Great Oaks Joint Vocational School district near Cincinnati: "We're talking about kids who hate math. But if you can show them they need it for blueprints, they'll do it."

Great Oaks is one of Ohio's 49 area vocational centers, multimillion-dollar technical complexes built to allow school districts to stretch their vocational education budgets by pooling money, equipment, and students. To make students at these centers more marketable, Ohio's Department of Education authorized a statewide applied academics program that puts more math, science, and communications into the vocational curriculum.

For example, Rosalie Bernard, an English teacher at Montgomery County Joint Vocational School outside Dayton, and Jim Frederick, an auto body instructor, team teach a course in communications—as it relates to auto body work. Students regularly give oral presentations on their job skills, perhaps explaining how to put on a fender.

Aspiring doctors and nurses at the Oakland Health Academy are boning up on anatomy.



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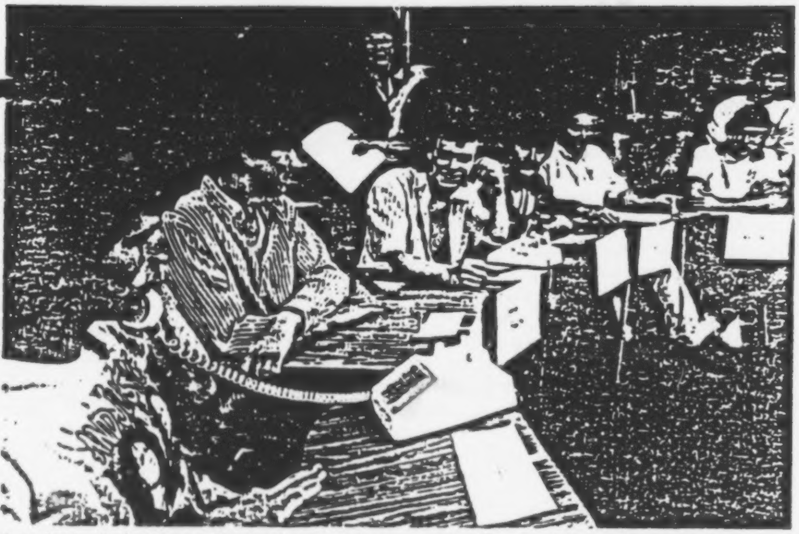


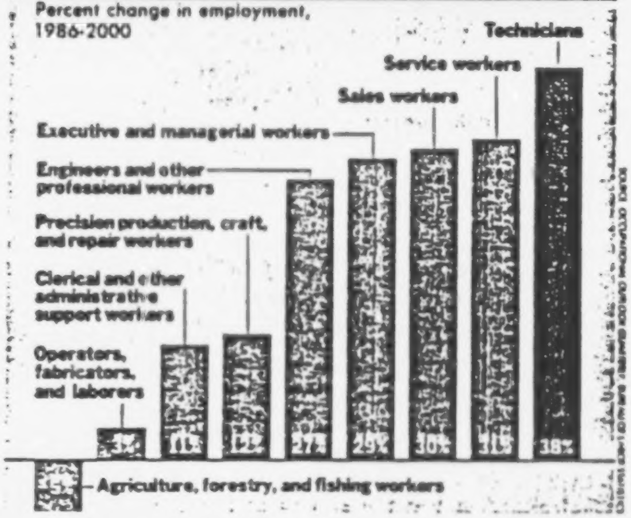
Auto body students near Dayton learn customer service by simulating a day on the job.

Says Bernard: “Our advisory committee of shop owners and foremen told us the kids they are getting today are skilled, but they can't communicate. They don't know how to defuse customer anger. And that's the one thing the business community wants.” Once each semester, the class simulates a typical day in an auto body shop, with customers calling, vendors complaining, and employees whining. “Who is your priority?” asks Frederick. Several boys respond with the correct answer: “The *customer*!”

One of the hottest vocational courses is Principles of Technology, taught in 1,200 schools in 47 states. It was developed by the the nonprofit Center for Occupational Research and Development (CORD) in Waco, Texas, in partnership with state vocational education agencies. The course teaches basic physics concepts, such as force and energy, through a series of hands-on experiments. For instance, students learn about thermal resistance by measuring the effectiveness of the insulation in their houses. This beats watching a teacher write equations on a blackboard. Says Dan M. Hull, president of CORD: “Only 12% of high school students study physics. Yet physics is the foundation of most new technologies. So we said, ‘Let's take physics and put it in work clothes.’ ”

The “clothes” are expensive: Lab equipment for the course, which includes oscilloscopes and lasers, runs about $30,000 per school. But a study conducted by John Dugger, an associate professor of industrial education and technology at Iowa State University, suggests the investment pays off. Two groups of students—257 who were enrolled in Principles of Technology and 275 who were enrolled in a regular physics course—were tested on basic physics concepts at the beginning and end of their junior or senior year in high school. The mean score for the physics group rose 11 points, to 66. The Principles of Technology group improved their results by an average of 33 points, bringing their mean score to 81. Says Dugger: “If we could take the methods of vocational education and combine them with the content of academics, we could really make progress in education. Principles of Technology is doing some of that.”

THE FASTEST-GROWING OCCUPATIONS



■ Keep kids in school. Some educators believe that reducing dropouts is the weakest justification for vocational education. In fact, it may be the strongest. One reason: A high school diploma raises earning power by almost 25%. Second reason: Close to 30% of labor force entrants through the year 2000 will come from racial and ethnic groups that have the highest dropout rates. Roughly 40% of blacks and 50% of Hispanics drop out of high school. The Bureau of Labor Statistics estimates that these groups will account for 45% of total labor force growth over the 1986-2000 period.

Proof that vocational education lowers the dropout rate is scant. But hear what Chris Horrocks, a student in a special electronics program for dropout-prone youngsters at Silver Creek High School in San Jose, California, has to say: “I *hated* school when I started high school. It was the worst thing in my life. Now I can connect schoolwork to my interest in computers. It gives a purpose to learning.”

Vocational programs also offer many students the chance to prove they can excel at something and provide them with the attention they normally do not receive in large comprehensive high schools. Says Chris Beasley, an electronics student at the Montgomery County Joint Vocational School: “Here, the teachers *care* if we graduate.”

To motivate “high-risk” kids to stay in school and, not unimportant, to meet the work force needs of local industry, in 1981 Hewlett-Packard and Lockheed Missile & Space Co. joined forces with the Sequoia Union High School District to start the Peninsula Academies. These three-year vocational programs in computers and electronics are taught in two high schools in Atherton and Redwood City, California. Some 40 local companies provide equipment, mentors, on-site labs, and summer jobs for students.

Now career academies—sometimes described as “schools within schools”—have spread throughout California: 18 academies in 16 cities offer similar programs. The state's pending 1989-90 budget calls for funding 15 more. On average, academy students have higher attendance rates and grade point averages than their nonacademy peers do. They also drop out less. For the first group of students to complete three years in an academy program, the statewide dropout rate was 7.3%, vs. 14.6% for a control group of nonacademy students.

What makes for a successful program? A supportive school district and a lot of industry involvement. In Oakland, for instance, students enrolled in the Oakland Health Academy at Oakland Technical High School go to one of seven local hospitals to receive training on such equipment as radiology machines, which the school could never afford.

Last year Oakland Health Academy graduated its first class. When the students started the program, their average achievement test scores ranked in the 30th percentile nationally. Four years later, 98% of these students received diplomas, and 86% went directly to two- or four-year colleges.

■ **Encourage post-secondary education.** Fred Monaco, director of career and vocation education in Pittsburgh, has an arresting thought: "General education is the enemy." He's referring to the roughly 30% of high school students who take the general education, or general studies, program, picking up a math credit here, a woodworking elective there, and finding themselves at graduation equipped for neither college nor work. In Pittsburgh the school board recently decided to eliminate the general education curriculum altogether, after a study showed that these students dropped out at a rate five to six times higher than those in college-prep or vocational programs.

Opposition to general education is growing. Around the country, schools are trying to steer these students, who tend to consider the high school diploma the end of their formal education, into a new "technical track" that provides a clear path to college. The Perkins reauthorization bill, with its emphasis on 2+2 programs that link the last two years of high school and the first two years of college, could help the movement. Says Chuck Bradley, a manufacturing manager with Texas Instruments in Austin, Texas: "I'd like to see general studies dropped and 2+2 programs become standard."

Bradley is a member of an advisory board—its members come from 13 companies, including IBM, Lockheed, Motorola, and 3M—set up in 1986 to help the Leander school district and Austin Community College develop a tech prep curriculum geared to the needs of the local electronics industry. Now students at Leander High School can take two years of junior-college-level courses, AC/DC Electronics and Semiconductors. After graduating, a student who goes on to Austin Community College and takes a minimum of six hours

WEST GERMANY'S COMPETITIVE ADVANTAGE

A West German advertisement for Lufthansa airlines pictures a middle-aged mechanic and four young apprentices examining an airplane engine below the tag line "Whoever wants to fly high needs a solid foundation." The message: Companies that invest in the training of young people produce better workers—and higher-quality products.

Each year about 500,000 West German companies provide on-the-job training for 1.8 million teenage apprentices—a group comprising 6% of the work force—at a cost of roughly $10 billion. In the U.S., apprentices make up a mere 0.3% of workers. Says Janet Carlson, assistant superintendent of vocational education for Washington State: "We are committed to training people for college. They are committed to training people for work."

Roughly 70% of German high school students study a vocation. Based on their performance in elementary grades, most youngsters are sent to one of three types of secondary schools: *Gymnasium*, or college prep, which continues through grade 13; *Realschule*, a middle-level school that readies tenth-grade students for apprenticeships or further technical training; and *Hauptschule*, a lower-level school that prepares youngsters for apprenticeships that begin after ninth or tenth grade. The system is rigid, but not many students fall through the cracks: Fewer than 10% leave without a school or apprenticeship certificate.

Apprenticeships generally run for three years, and combine three or four days of on-the-job training with one or two days of classroom instruction at a public vocational school. Wages average $400 a month—less than journeyman pay. The government sets standards—curriculum guidelines and examination requirements—for 430 occupations. Companies are not obliged to hire the apprentices they train, nor are apprentices required to stick around once their contracts expire.

So why do companies bother? Tradition, for one thing. The German apprenticeship system dates back to the Middle Ages. In addition, German companies say that it offers the following advantages: Students learn good work habits on up-to-date equipment at a young age; employers train workers for future openings; and companies and students have three years to decide if the match is a good one. Hewlett-Packard's West German subsidiary takes in about 80 new apprentices a year, at an annual cost of about $5,000 each, and eventually hires almost all of them. Says Stephen Hamilton, a professor at Cornell University who is writing a book comparing job training in the U.S., and Germany: "There is an unchallenged belief in Germany that one of their main sources of international competitiveness is the apprenticeship program. They could be wrong, but they're not willing to abandon it and see what happens."

Hewlett-Packard apprentices in Stuttgart show off their work.

of classes automatically receives an additional 12 hours of credit for the electronics courses. Says Elbert Marcom, assistant vice president for academic affairs at the college: "This creates excitement for secondary students, because they can see a four-year scheme. These kids are capable of handling much more technical material then we've been willing to admit."

■ **Provide jobs.** Ohio and Illinois need welders. The construction industry projects a serious worker shortage in the mid-1990s. Millions of jobs beckon high school graduates with skills. The diploma alone is not enough: Between 1967 and 1987, says the Bureau of Labor Statistics, high school graduates accounted for 60% of the growth in unemployment. According to a study by John Bishop at Cornell, vocational school alumni are less likely to be unemployed and earn 7% to 8% more than other high school graduates—but only if they find jobs in their field. The trouble is, about half do not.

Vocational education needs to be more market-driven: The schools should be supplying what the labor market demands. Under a new Illinois plan called Education for Employment, the state will provide funding for vocational schools only if they offer programs in job areas where workers are needed. Companies have been invited to the schools to look at the curriculums—some of which have not changed much since 1950. In the aftermath of the visits many obsolete courses have been dumped.

The matching of educational skills to the job market is critically important for blacks and Hispanics. Says Charles Benson, director of the National Center for Research in Vocational Education at the University of California at Berkeley: "I can assure you the federal government is *not* addressing the problem of steering disadvantaged people into careers with good job prospects."

Under the proposed Perkins legislation, most federal money would flow to areas with a high percentage of poor kids. Yet nothing in the bill ensures that those youngsters would get into high-quality programs. The government should set aside money to reward schools that successfully bring black and Hispanic youngsters into careers with promising futures.

■ **Retrain older workers.** While companies can take comfort in knowing that vocational schools are beginning to roll out a new, 1990s line of employees, they still face the uneasy situation of what to do with the obsolete workers they already have. Says Ernie Morris, president of Fred Jones Manufacturing in Oklahoma City: "The single most important item in this country for the next ten years will be employee education and retraining."

Perhaps no vocational school has responded more aggressively to the needs of the burgeoning adult education market than Oklahoma City's $20 million Francis Tuttle center. Built in 1981 and supported by tax dollars from five surrounding school districts, Tuttle caters to a society of lifelong learners: Students range in age from 16 to 60. High school students attend free; full-time adults pay $365 a semester. Classes run from 7:30 A.M. to 10 P.M., six days a week, and new students are allowed to enroll each Monday. Last year 10,000 adults updated their skills at Tuttle.

When a student signs up for one of Tuttle's 28 programs—whether it's building and grounds maintenance or instrumentation and control—he or she takes an aptitude test that determines the starting point. From there, the student sets his own pace in individualized instruction that combines textbooks and videos with hands-on labs. The reward for passing all the course requirements: a certificate of completion or, in some cases, an associate degree. Says Carol K. Blalock, who entered Tuttle at 45 to learn automated manufacturing and robotics after being laid off from her electronics assembly job at AT&T: "One reason I thought this was such a great program was that if you already understood something, you could whiz on through. I could get marketable skills in a shorter period of time."

Vocational training changed Clarice Kooistra from a gas pumper to a machine programmer, and helped Tim Titus become a supervisor.

To lure industry to Oklahoma, the state offers to train workers for new facilities at no cost to the company at technical centers like Tuttle. Laments James A. Caillier, president of Delgado Community College in Louisiana: "We're losing our industry to Oklahoma because they've done such a good job of packaging their technical programs."

The U.S. can no longer afford to squander its human resources. To better mine its talent, the country must adopt an education policy that acknowledges the vast diversity of its students and offers options suited to their individual needs and learning styles. Vocational education is one option—Toyota, IBM, and Lockheed are among the corporations that consider it a vitally important one. ◘

"We Have a Problem"

Terry, fifteen, is never satisfied with her grades—or herself—no matter how much we try to reassure her. Why does she feel so bad about herself? Is there something she won't tell us?

By Jane Marks

Nan's story

"I wish I could get Terry to stop driving herself so hard," said Nan Rankin, 40. "You'd think she was in law school, the way she tenses up. But she's only a sophomore in high school. The worst part is that she works and works and still gets only C's—and then she feels like a failure.

"I don't know how many times we've tried to tell her that C's are perfectly respectable—especially when you're taking all honors classes. But she won't *listen!* She only takes time off for one thing, and that's chess club. If I urge her to take a break, she says, 'I don't have time.'

"It bothers me to see her growing up with the feeling that she's got to achieve, or else. I know what that feels like. I *had* to strive, because no matter how well I did in high school and college—even in graduate school—it was never enough to please my cold, demanding parents. That's why I've always gone out of my way to give both our daughters lots of praise.

"My husband, Alan, doesn't really understand my concern. He's a research scientist, and to him, work is pleasure. He can't wait to get to his lab every day. He's the brilliant one, the one our daughter Kate takes after. Kate's nineteen, goes to Yale, and has always been a whiz in everything. It all seems to come naturally to her.

"But Terry is *not* the same kind of kid. She plugs away at her work and worries. Far from *putting* pressure on her, it's been my mission in life to chase away her self-doubt.

"That's why, even when the children were in grade school, I asked Kate not to show Terry her all-A report cards. 'You just happen to be very gifted,' I explained to Kate. 'Terry would feel sad if she saw what you got.' And Kate was wonderful! She'd say, 'I got about the same as you,' when Terry asked her.

"In eighth grade, Kate did win the Top Student award, which was a desk set. Terry was excited for her and planned to win one herself someday. But of course she didn't come close to winning. So Alan and I bought her a set. 'But what's it *for?*' she asked, touching the polished wood of the penholder. 'Just because we're sure you came real close, and we think you're great,' I said. But Terry didn't look pleased.

"'I didn't win this,' she said, and that pen set stayed in its box until I finally gave it away to a rummage sale.

"I thought it might be easier for Terry once Kate went to college. But last year she became real intense, and this year has been the worst. We've told her at least a hundred times that it's enough that she's *in* honors classes. She doesn't have to get A's or even B's. But she doesn't hear us. Even when she does get a B, she isn't satisfied. She says, 'Mom, how come Kate always did so much better with less effort?'

Burning the midnight oil: A child's excessive preoccupation with schoolwork maybe masking a deeper self-doubt.

"I honestly don't know how to answer. I say, 'It probably only looks that way to you,' but she doesn't buy that; she says, 'Mommy, are you telling the truth?' And I lie through my teeth and say, 'Of course.' I feel terrible about lying, but what am I supposed to say: 'Kate's smarter'? or 'You're not as capable as Kate'? I'd rather lie than hurt her feelings.

"I worry more and more about Terry's lack of a social life. She hasn't started dating, but she should at least have girlfriends. Kate always had a ton of friends, but Terry doesn't get a phone call.

"Terry doesn't talk much about not having friends, but recently, when the Curry girls had a barbecue and a backyard dance and didn't invite her, and we could hear the music from down the street, Terry did say, 'Mom, why don't kids like me?'

"I wanted to cry, but I said, 'Oh, darling, they do! But you need to be more avail- (*Continued on page 65*)

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(From page 60) able. . . . Terry just shook her head. 'Mom, I don't have time to hang around the pizza place every day and giggle at boys.'

"Alan says it's probably just an awkward phase and she'll outgrow it soon. He loves her, but he's not very tuned in to feelings, and frankly I don't think he's home enough to see how tense Terry's become. I do talk to Kate about it sometimes, and she's really super. But we haven't solved it.

"I phoned Kate after that Curry party, and she said, 'I know what to do.' The next day she called to invite Terry up to Yale for a weekend, to give her some fun and maybe a pep talk. I thought that was so kind! I put Terry on the bus and told her how lucky she was and how much fun she'd have. . . . but when she got home, she looked miserable.

" 'Wasn't Kate nice to you?' I asked. Terry said, 'Yes, Kate was very nice.' 'Well, didn't you have fun?' I persisted. Terry just shrugged. 'Did you meet some exciting people?' I asked—and got another shrug. I wanted to shake her and call her ungrateful and cold, but I held myself back. Later that evening, I told Alan.

" 'There's a lot of competition between those two,' he said. 'And the problem is, Terry's always going to lose.' I said, 'That's not so.' I reminded him of when the girls were little; how Terry used to idolize Kate to the point that she wanted to copy her in everything—and how sweet and almost motherly Kate was in return. Kate's *never* undermined her sister. In fact, she's always told Terry, 'You can do it, kid, I know you can.'

" 'One thing I learned from looking for research-grant money,' Alan said, 'is how to pick up on competition. I tell you, it's there, and it isn't a fair fight.'

" 'But this is not a fight at all,' I insisted. Alan just shook his head. Terry continued to push herself unmercifully . . . and I continued to worry.

"But last Friday, something else happened—something more upsetting—and I don't know what to make of it. It had started snowing unexpectedly—the first snow of the season—so I decided to pick Terry up at school so she wouldn't have to walk home in her light jacket and without wearing boots.

"But when I arrived at school and found the chess club's meeting room, the faculty advisor, Miss Kim, looked puzzled and said, 'But Mrs. Rankin, I don't understand.' Yes, of course, she knew *Kate* Rankin ('a first-rate player'), but Terry Rankin? 'I'm sorry, I didn't even know that there was another Rankin.'

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> ". . . When Terry came in at six o'clock, freezing, with her hair and shoes soaking wet, she said, 'Hi, Mom,' and tried to hurry past me. I said, 'Terry, please. I want you to tell me where you were.' . . ."

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"Driving home, I felt confused and embarrassed, but mostly worried. If Terry wasn't in chess club, where *did* she spend Friday afternoons? Had her school frustrations sent her off the deep end in one way or another? Was she in some kind of trouble? I tried not to let myself imagine awful things, and I tried to stay calm.

"When Terry came in at six o'clock, freezing, with her hair and shoes soaking wet, she said, 'Hi, Mom,' and tried to hurry past me. I said, 'Terry, please. I want you to tell me where you were.'

" 'I don't *have* to,' Terry shot back. 'You can't make me. I'm entitled to a life, too!' Since then, she's been very defiant, very secretive, and I'm frightened. I don't know what's up, but it's clear that Terry needs help."

The counselor replies . . .

Philip Oliver Diaz, M.S.W., is associate director of Rockland County Mental Health Center and coauthor of Breaking the Cycle of Addiction: A Parent's Guide to Raising Healthy Kids *(Health Communications Inc.).*

"Nan Rankin called and told me what was going on. She said that Terry still wouldn't divulge where she'd been. 'Should we all come in as a family?' Nan wondered.

"I said I thought it would be best if Terry came in by herself a few times, so that she and I could get acquainted. Later, we would all talk together. But Terry had her own plans for the first session; she sat in my office and worked on her math.

" 'Terry,' I said, 'is this really the way you want to use this time? Or would you like to talk with me about anything?'

" 'No,' she said firmly. 'I'm only here because my parents forced me to come.'

" 'I guess you know they were—and are—very concerned about you, and where you go on Fridays,' I said.

" 'I don't want to talk about it,' she retorted. 'Besides, what's the point? I know why they brought me here. It's not just about Fridays. They want you to fix me—to be like Kate.'

"I asked her what she meant. 'Don't you know about Kate? She's Miss Perfect! I mean she *is* really wonderful. She just makes me mad sometimes. Like she never stops telling me I can do it, that I'm just as smart as she is and I just have to try a little harder. Well, that's a lie! I know because I'm trying as hard as I can!

" 'It's the same with my parents,' Terry went on unhappily. 'They *always* lie. They say, "We're proud of you," but who are they kidding? They can't even face the fact that I'm not another supergenius like Kate. I guess they're so disappointed, so embarrassed . . .'

"I said, 'How do you know that?'

"Terry snorted. 'Mom will say, "Oh, you got a C plus—that's so fabulous!" But she'd never be so condescending to Kate. Can't they just *respect* me? Wouldn't it be fabulous if they could think I'm okay even though I'm not like them?'

" 'What *are* you like?' I said to Terry gently.

"She sighed. 'I don't care about the things they care about. And I don't want to go to Yale like Dad and Kate. I just like helping people.'

" 'Tell me how.'

" 'I go to a hospital—on Friday afternoons—and I just help out. That's where my best friend works.'

" 'Who is that?'

" 'Her name is May and she's a

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nurse,' Terry said. 'And she's nothing like the snobs my mother teaches with and my father works with and my sister lives with! May doesn't know anything about chess or biophysics or the art-history junk Mom teaches. But she knows how to care for people, and that's exactly what *I* want to do.'

"I said, 'These are important things you're telling me, Terry. Don't you wish your parents could know, too?' She shrugged. 'After all,' I pointed out, 'you really *did* keep this a secret. You can't hide an important part of yourself from your parents and still expect them to understand.'

"'I guess you're right,' she admitted. The next week, the four of us met, and Terry told her parents about the hospital where she had been volunteering all semester.

"Both her parents were relieved—and very, very touched. 'But that's a *wonderful* thing you're doing,' her mother said.

"'I'm sorry I lied,' Terry said.

"'I'm sorry you felt you had to,' Nan answered.

"'I was ashamed to tell you I want to be a nurse,' Terry blurted out. 'I mean, let's face it. In our house, if you're not going to an Ivy League college and if you're not a big-deal professor, you're nobody—you are just a failure.'

"'No, darling, *I'm* the one who's a failure if that's the kind of message I've given you,' Nan said unhappily.

"I told them it sounded like the only real failure was a classic failure to communicate. The misunderstanding stemmed from the fact that Nan—because of her own unhappy, pressured childhood and because of Kate's daunting abilities—had bent over backwards to reassure Terry that she wasn't second-rate. But Terry had read her mom's concern *for* her as disappointment *in* her. I said, 'Sometimes the more a parent tries to reassure a child, the less convincing it sounds.'

"'So that's where the pressure came from,' Nan said. 'We kept telling Terry that we weren't comparing her to Kate. We fooled ourselves, but we didn't fool Terry!'

"In the weeks that followed, I met several times with Nan and Alan in order to help them resolve what they saw as 'unacceptable' feelings. 'I *wanted* to feel that Terry was fine,' Nan said. 'But it broke my heart when she didn't just rise to the top of the heap the way Kate did.'

"Alan nodded. 'I guess we take superachievement for granted,' so we always regarded Terry—a child who's never failed—as a poor soul just because she was average.'

"'How can we change?' Nan asked. 'I know in my head that nursing is a perfectly respectable profession, but deep down, I can't help thinking, Why a nurse? Why not a doctor? No wonder poor Terry felt pushed.'

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...As Terry's tension diminished, a new sense of humor—and fun—emerged. She made some new friends. Dating is in the future, but some of her 'buddies' are boys, and the phone has started ringing...

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"I assured the Rankins that acknowledging their disappointment was an important step toward resolving it. To help, I encouraged them to try to redefine success—to see it not just in terms of grades and academic achievement and a high-prestige career, but in terms of personal qualities as well, like compassion. 'Terry is way *above* average in that,' I said.

"'You're right,' Nan said at last. 'I just hope it's not too late to let Terry know.' Alan agreed, and in the following weeks, some important changes came about. Terry—with her parents' support—agreed to drop her honors courses for second semester, and for the first time, Terry felt so confident and able to master her work that she began to linger after school to play sports or just sit and gab with classmates.

"'It was weird: I felt sort of guilty at first,' Terry told me, laughing. 'But now I feel good—no more butterflies in the stomach.'

"Terry put off telling Kate what she'd done. And when she finally did level with her, Kate *was* upset that their parents had let Terry 'cop out' on her honors courses. 'You won't even have a chance of coming to Yale,' she warned. But when she began to give Terry another pep talk about trying harder, Terry said, 'I'm not copping out. I think I'm just *finding* out that I'm okay without doing a million hours a week of homework.'

"Kate listened in amazement. 'Boy, you sound different,' she told her sister. 'Listen: Next time I drive myself crazy trying to juggle too many courses and too many commitments because Mom always says I'm supposed to be gifted, well, I'll come to *you* for a pep talk!'

"That made Terry feel good. And as her tension diminished, a whole new sense of humor—and fun—emerged, and she made some new friends. Dating is still in the future, but some of her 'buddies' are boys, and the phone has started ringing.

"Terry is still enthusiastic about the hospital, but she no longer considers it her only joy. She is a faithful volunteer and often recounts her experiences later at home, and her parents listen with interest. Nan and Alan finally got to meet May, and they hit it off so well that May has become a genuine friend of the family. 'Your daughter is fantastic,' May told the Rankins. 'Everybody loves her.'

"Last month, I saw the Rankins for a final session, and I was pleased. 'We're trying things differently at home now,' Nan told me: less dinner-table talk about achievements and more sharing. 'There's a lot more listening—and a lot more laughing,' Nan said. Even Alan has found that there's life beyond the lab and is planning time off for a family trip.

"Nan always meant well when she'd shaded the truth for Terry, but even with good intentions, parental dishonesty does more harm than good because children *will* sense the lack of candor and will mistake the motive for something worse.

"The Rankins have learned how much warmer family life can be without a lot of subterfuge, and I don't think they'll ever be tempted back to the old way." ●

Jane Marks is the author of three nonfiction books for teenagers, including *Help, My Parents Are Driving Me Crazy* (Ace Books). She lives in Westchester County, New York, with her husband and two sons.

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"My Son Needed To Feel Needed"

Unpopular and unmotivated, he found a way to feel good about himself.

By Margaret White

"There's nothing to do, Mom," my fourteen-year-old son responded when I questioned him about all the time he was spending glued to the TV or his tape deck. It was the sad truth. Bill had no leisure activities and no friends. As a high school freshman, he struggled academically because of his learning disabilities; these same disabilities made him physically clumsy and socially awkward. He was an attractive brown-haired boy, but small for his age, looking far younger than his fourteen years. When he wasn't the butt of cruel taunting, his peers excluded him. "If they're not making fun of me, they act as though I'm invisible, Mom," he once told me. I worried because I could see him becoming more remote, wrapped up in a world of his own.

"Well, if other kids don't seek Bill out, he has to get involved in some organized after-school activities, and then maybe he'll make some friends," my husband, Jim, said one night when we were discussing the problem. "Remember all the fun our girls had with the other kids in the school band?" he added hopefully. Bill's two older sisters had both been talented musicians; one played the flute, the other the clarinet. Bill's musical attempts had ended in failure. Still, it seemed logical to pursue the idea of joining some kind of school club.

"Let's get out the high school yearbook and look at the schedule of after-school clubs," I said cheerily to Bill one night when he was comfortably arranged in his usual spot in front of the TV set, a bag of potato chips at his side. He had taken to eating at every opportunity. All he needed now was to become known as "the fat kid," I thought grimly.

"Okay, Mom," he said, reluctantly tearing his eyes from the screen.

Helping less fortunate children requires no superior talent or skill—just a willing heart. And the resulting payoff is truly immeasurable.

We studied the list of after-school clubs. There were foreign-language clubs, but Bill was having a tormenting time just getting through his first year of Spanish.

"Well, forget that," I said, turning the page. Next there was a write-up on the Forensic Club. "For those who excel in public speaking and the great art of debate," read the caption. Above it was a photograph of a triumphant group of smiling teens. Together we stared silently at the happy group picture.

On the next page we found a story about the Quiz Teens Club. There were more triumphant smiles under the headline "Our Team Wins First Place in the Battle of the Brains." And if you were not academically brilliant, there were opportunities galore for superathletes.

I closed the book, not looking at Bill. "Well," I managed to say brightly, "we may have to think of other options." He seemed relieved to return to his comfortable niche in the TV room. "Sure, Mom," he said.

It wasn't surprising that the culture in the high school was highly competitive—ours was an upper-middle-class, highly competitive community

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Feeling Needed (Continued)

of parents. The school was simply an extension of the parents' values. There was no way I could change that reality, no matter how much it excluded my son.

The school tries to help.

Perhaps someone in the school administration would have a creative idea, I thought. Surely they must have dealt with a similar problem before. I called Bill's guidance counselor, and he responded in his usual warm and friendly manner.

"I'll get in touch with Matt Peterson, the drama teacher. The kids are putting on a play. Maybe Bill could get involved by helping with the scenery or lighting or makeup," he suggested.

Mr. Peterson couldn't have been kinder. A couple of days later he stopped Bill in the hall.

"Could you give us some help at rehearsals in the gym tomorrow?" he asked. "We could really use an extra pair of hands."

After school the next day, Bill went straight to the gym. Hectic preparations were in progress, and no one noticed him. Bill circled uneasily around the group. Finally he gathered up his nerve and said in a small voice, "I'm here to help." Eventually one of the girls handed him a broom. Bill swept disconsolately for a while. He finished and stared at the pile of dust he had accumulated. No one had provided him with a dustpan. After a brief, halfhearted search for one, Bill came home.

Searching for answers.

After that, the days followed in the same pattern as before. Bill went to school every day and struggled with the academic subjects. In the afternoons he struggled painfully with homework. In the evenings he watched TV, listened to his tapes, and then went to bed. Weekends were endless stretches of boredom. I thought desperately of putting an ad in the paper: "Lonely teen needs companionship. Please call desperate mom. No need to send photo." And then I chanced upon a brief paragraph in our local paper:

"Town recreation center needs teenage volunteers three afternoons a week and on Saturdays for recreational program for handicapped children. If interested, please call the center director."

"Bill, I'd like you to read this," I said to him one evening, showing him the item. I watched his face while he read it, but his expression told me nothing. "Well, what do you think?" I asked finally. "I don't know, Mom. What makes you think I could do that kind of work? Why do you think the kids would pay any attention to me?"

"Well, I think it's worth a try," I said firmly. "What have you got to lose?"

He looked at me doubtfully. "Well, I suppose I could call . . . ," he said, his voice trailing off.

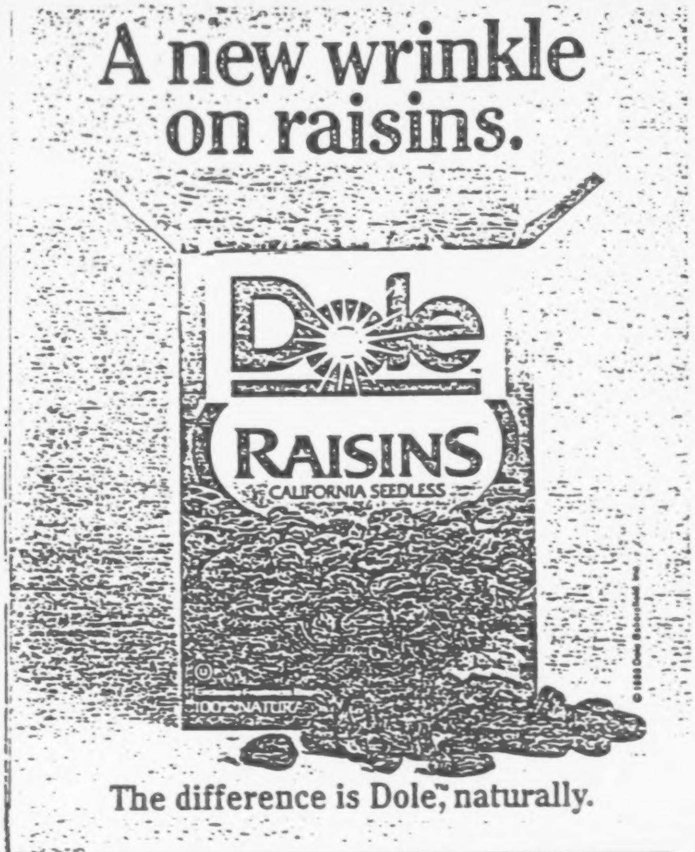
"Great!" I said. At least he was willing to make the attempt.

New hope.

The next week I drove him to the recreation center after school. We were met at the door by the director, a cheerful young man with an engaging smile who welcomed us warmly.

"Glad to have you aboard, Bill," he greeted us. "Come on in and meet the troops." Bill followed obediently but cast me an

(Continued on page 90)



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Feeling Needed (Continued)

(From page 86) apprehensive look. I smiled back. It would be up to him from now on.

I could see parents dropping off their children at the front door and the staff members and young volunteers greeting them. One of the program's teenage volunteers was taking the hand of a small boy in leg braces who walked with difficulty. "Come on, Josh," he said gently.

We waited eagerly that night at dinner to hear Bill's comments about how the afternoon had gone. "Did you like working in the program?" Jim asked.

"I feel so bad about some of the kids, Dad. A couple of them have such trouble walking and even talking," he said sadly, looking down at his dinner plate.

"Yes, it is sad, Bill, but if you can help the children have some fun and learn a few things, you can make them feel happier," I pointed out.

"I did help one little boy named Josh play ball."

"That's great," his two older sisters said.

Time to change the subject, I thought. The test would come in two days, if he wanted to go back. He did.

Finding his way.

A week or so later I got some encouraging feedback from the director when I stopped at the recreation center to pick up my son. The director took me to one side and said, "Bill's doing very well. He's got a nice touch with the kids and a lot of patience." I felt a glow of pride. But I could see it myself. Waiting in the car, I watched Bill bending down to tie one of the children's shoelaces.

"Hey, Joey, you might trip on that," he said. There was a new confidence in his voice. Someone needed him.

Bill began to talk about the children at home. Each "camper" was assigned to one particular volunteer. Bill's charge was a seven-year-old boy named Tommy, who had cerebral palsy. "I helped Tommy do a couple of laps in the pool today," he told us one night at dinner, trying to sound casual but failing completely. We all beamed approval. Our whole family knew how frightened Tommy had been of the water.

One warm Saturday afternoon I found Bill busy foraging in the attic. "What on earth are you doing?" I asked. It was unbearably stuffy.

"I'm looking for toys for the kids," he said shyly.

"Oh," I said. "Can I help?" came almost automatically to my lips, but then I stopped myself. This project had to be Bill's—just as, in a way, these were his special kids.

Not an outsider.

It was wonderful that Bill was helping these children, but the children were helping him just as much.

No longer did he sit entranced in front of the TV set. Instead he spent several afternoons a week busily occupied at the center. I saw a gradual change in his demeanor. He seemed less self-absorbed and distant—and more cheerful and confident.

An extra bonus of the volunteer work was that Bill was making friends with the other teenage volunteers. Bill was no longer an outsider, nose wistfully pressed against

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the glass, looking in. He was finally included in an activity with his peers—one that required no superior talent, just a warm heart.

When special occasions arose, such as Halloween, the center's staff always planned parties for the youngsters. Weeks before these events the teen volunteers would begin working on the decorations and gifts. Instead of pining about being excluded from high school parties, Bill was busily involved in meetings with the other teens at the center.

Success at last.

Some of the confidence he had developed brought a new spirit of enterprise. One day he surprised me by saying, "You know, Mom, the center needs more volunteers. How do you think I could get some of the kids at the high school interested in the center? I bet if they knew about it, a lot of them would want to help, too."

I thought for a minute. "Why not write an article for the high school newspaper about the center?" I said.

"Write an article?" Bill sounded aghast. Writing was not his forte.

"Yes, you write it, and Dad and I will help you edit out any mistakes."

Slowly, painfully, over the next few weeks Bill wrote his article about the center. Putting his feelings and ideas into acceptable prose was a difficult task for him, but he soldiered on. When he finished, we helped him correct all the mistakes in spelling and punctuation.

Carefully we proofread the piece one more time before Bill submitted it to the editor. We wondered if it would be published. It was an offbeat topic for the school paper. But several issues later the article appeared, nicely situated on the second page. Bill had the thrill and excitement of seeing his first byline. And the results of celebrity were heady.

"Well written, Bill," commented a teacher who passed him in the hall.

"Good article, Bill," said several classmates.

At lunchtime one of the ladies who worked in the cafeteria spoke to him. "My little boy goes to the center. I think what you young people are doing is just marvelous," she said.

But the greatest impact of the article was made when several kids did seek him out and express an interest in volunteering at the center.

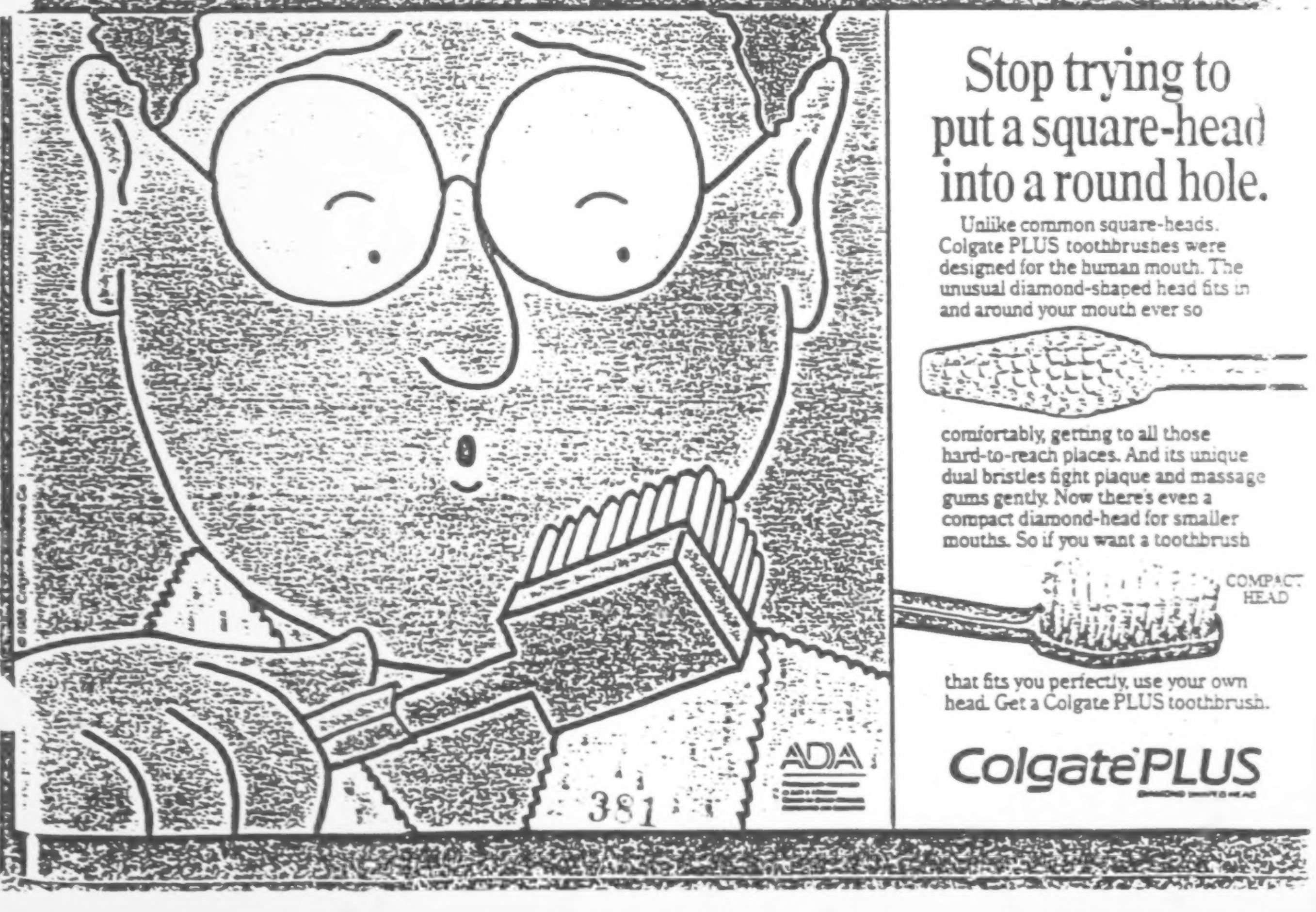
"A couple of guys may come with me next week after school," he told me, amazed and happy.

When the school year ended, the center gave a special party for the volunteers. They each received a plaque in appreciation of their help.

Bill proudly hung the plaque in his bedroom. All of us value it more than any academic or sports trophy that was ever won by any child.

But the plaque was only a symbol of the real gift Bill received—the feeling of being needed, the feeling of being important. That new self-esteem has given him the courage to face his problems with greater equanimity. For us as a family, we have shared in the joy of watching Bill, who seemed so lost, find himself in helping others. ◉

Margaret White is a registered nurse and free-lance writer who lives in New Jersey with her husband and three children.



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THE NEED FOR BLENDING ACADEMIC AND VOCATIONAL STUDIES

This document contains quotes and other statements concerning the need to raise the academic skills of students in the general and vocational education tracks. The need to prepare students for formal educational training beyond grade 12 is also emphasized. Refernces are given in parentheses at the end of each statement.

1. **"By the year 2000, the average job in the Southeast will require almost fourteen years of formal education."** (United States Department of Labor. The Southeast's 21st Challenge. Atlanta, GA: U.S. Department of Labor, Employment and Training Administration, 1990.)

2. **"The average new job being created here in South Carolina requires about 14 years of formal education...that means entrants are expected to: 1) be able to reason through a variety of work situations without standard solutions; 2) interpret instructions involving written, oral and diagrammatic form; 3) perform arithmetic, algebraic, and geometric operations; and 4) read, write, and speak on a variety of subjects of considerable complexity."** (from a speech delivered to the Anderson, Oconee, and Pickens County Personnel Associations, August 22, 1989 by William A. Dealy, Jr., Regional Management Analyst and Coordinator of Research, Demonstrations, and Evaluations for the U.S. Department of Labor, Employment and Training Division, Atlanta, GA.)

3. **Of the new jobs available in the Southeast by the year 2000, a two-year college education will be required by 21% of new private sector jobs, and an average of two years of postsecondary education will be required by 45% of new public sector jobs.** (United States Department of Labor. The Southeast's 21st Challenge. Atlanta, GA: U.S. Department of Labor, Employment and Training Administration, 1990.)

4. **Students who think they don't need many skills to work in textiles or other manufacturing industries will be disappointed. "...high school grads are having trouble getting jobs in manufacturing...companies are setting more sophisticated requirements for blue-collar jobs."** (Mandel, M.J. Economic Trends: The High Cost of Not Going To College. Business Week, May 1, 1989, p. 20)

5. **"In 1979 the average male college graduate aged 25 to 34 earned 18% more than a high school graduate of the same age. By 1986 the advantage had jumped to 43% and it remains at about that level today."** (Mandel, M.J. Economic Trends: The High Cost of Not Going To College. Business Week, May 1, 1989, p. 20)

PROCEDURES FOR OBTAINING

SBA LOANS

GENERAL CREDIT REQUIREMENTS

A loan applicant must:

Be of good character.

Show ability to operate his business successfully.

Have enough capital in an existing firm so that, with SBA assistance, he can operate on a sound financial basis.

Show that the past earnings record and future prospects of the firm indicate ability to repay the loan and other fixed debt, if any, out of profits.

If the venture is a new business, be able to provide, from his own resources, a reasonable amount of the total required funds, so that with the loan and his own investment, there will not exist an unreasonable debt to equity relationship. Also, sufficient equity is necessary to absorb potential initial operating losses sustained by most new businesses. A number of factors are considered when determining the minimum amount of equity required.

MATURITY

SBA business loans may be for as long as ten years, except funds to be used for construction purposes which may have a maturity of 25 years. However, working capital and inventory loans usually are limited to seven years.

INTEREST

Within certain limitations, bank sets the interest rate on guaranteed loans.

COLLATERAL

Security for a loan may consist of one or more of these:

A mortgage on land and/or buildings.

Financing statement covering marketable merchandise (inventory), and/or equipment, and/or an assignment of current accounts receivable.

Guarantees or personal endorsements, sometimes secured by personal assets.

(SEE OTHER SIDE)

FOR NEW BUSINESSES

Describe in detail the type of business to be established.

Describe experience and management capabilities.

Prepare a statement of how much you and others, if any, have to invest in the business, the amount you will need to borrow and the proposed use of the funds, including the personal investment.

Prepare a current financial statement (balance sheet) on each person that will have ownership and/or management responsibility in the business listing all personal assets and all liabilities.

Prepare a detailed projection of earnings for the first year the business will operate.

List collateral to be offered as security for the loan, indicating your estimate of the present market value of each item and any prior liens.

Take this material to your banker. If the Bank does not agree to make a direct loan, ask if consideration would be given a loan under SBA's Guaranty Loan Plan. If the bank is interested in a SBA guaranty, the banker will contact SBA for a discussion of your application. In most cases, SBA will deal directly with the bank.

*

FOR ESTABLISHED BUSINESSES

Prepare a current financial statement (balance sheet) listing all assets and all liabilities of the business with a reconciliation of net worth; do not include personal items.

Have earnings (profit and loss statement), for the previous three years and the current period, end at the balance sheet date.

Prepare a current personal financial statement of the owner, and/or each partner or stockholder(s) owning 20 percent or more of the corporate stock in the business.

List collateral to be offered as security for the loan, with your estimate of the present market value of each item and any prior liens.

State amount of loan requested and explain the exact purpose for which it will be used.

Take this material to your banker. If the Bank does not agree to make a direct loan ask if consideration would be given a loan under SBA's Guaranty Loan Plan. If the bank is interested in a SBA guaranty, the banker will contact SBA for discussion of your application. In most cases, SBA will deal directly with the bank.

* If SBA Direct funding is to be sought, an application must first be submitted to your Bank. If the Bank then declines the application, or declines to participate with SBA ,a letter of decline must be obtained from the Bank. The letter must be on Bank letterhead and state the amount of money applied for, the purpose for which intended, and why the loan was denied. Contact Loan Officer ________________, Phone 765-5377, Financing Division.

HE Leaflet 44

HOME-BASED
BUSINESS

INSURANCE NEEDS

One of the important considerations when you start a home-based business venture is deciding on the types and amounts of insurance needed. Insurance is needed to protect business and personal assets against losses due to claims filed against the business or due to property damage by people or natural perils. This publication is designed to help you gain a general understanding of insurance types, state regulations, insurance alternatives, and steps to consider in organizing an insurance program. It will not replace the need for dealing with a professional insurance agent or broker.

With the help of a competent counselor, a comprehensive insurance plan can be designed to meet your specific needs. Used correctly, insurance can contribute to the success of your business by reducing the uncertainties under which you operate.

If you will operate out of your own home, check to see what coverage your homeowner policy provides. Most home policies will not provide for coverage for your beginning business unless a product and premise liability rider is attached. For example, the fabric and accessory supplies used in a home sewing business would probably not be covered by a regular homeowner's insurance policy. Any tools used or stored in the home for business purposes would likely require a rider for coverage.

TYPES OF INSURANCE

Property insurance protects the owner of the property (or the mortgagee) against loss caused by the actual destruction of a part or all of the property by fire, windstorm, explosion, hail, smoke, and other perils. Fire insurance is generally considered a must. Additional peril concerns can be added at a relatively small additional cost. Property insurance can be obtained for real property (buildings) and personal property (machines, furniture, finished goods, components, etc.).

Liability insurance protects the business from financial loss due to any claims of bodily injury or property damage in connection with business operations. Most liability policies, in addition to bodily injuries, may now cover personal injuries (libel, slander, etc.) if these are specifically insured.

Product liability insurance protects the business from claims against defective merchandise. Coverage applies to the products once they leave the manufacturer's hands, and covers the manufacturer in case the ultimate user of the product sues for bodily injury or property damage. Services, too, are a marketable commodity that can cause damage, and therefore may be subject to product liability.

Automobile insurance may encompass both physical damage and liability coverage for company owned vehicles or vehicles used for business purposes.

INSURANCE FOR EMPLOYEES

Worker's compensation insurance covers treatment of injuries and loss of pay related to employee accidents or illnesses on the job. It is mandatory in South Carolina if you have four or more employees.

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Fidelity bonds, placed on employees with access to cash receipts or other company funds, reimburse loss from embezzlement.

Employee health and life insurance provides workers and dependents with financial benefits in case of illness or death. If a staff is too small to qualify for group benefit policies, an owner can take out individual policies for each. Employers are usually required to set aside benefit funds for workers who belong to labor unions.

YOUR INSURANCE AGENT

Seek assistance and open communication through the insurance representative from a reputable insurance carrier. Trade associations often offer special rates and policies to their members. Planning the business insurance program can best be done with the advice of an agent or broker who specializes in business insurance.

If you have questions or concerns that aren't answered by your insurance agent, you may want to contact:

The SC Insurance Commission
1612 Marion Street
Columbia, South Carolina
Phone (803) 737-6160

Mailing Address: PO Box 100105
Columbia, SC 29202-3105

ORGANIZING YOUR INSURANCE PROGRAM

1. Recognize the risks. The first step toward good protection is to recognize the risks you and your business face. Some businesses will need coverages not mentioned in the check list. For example, you can purchase a special glass insurance to cover all risks to plate glass windows, glass signs, doors, showcases, and counter tops.

2. Decide what perils to insure against and how much loss you might suffer from each.

3. Cover your largest loss exposure first.

4. Use as high a deductible as you can afford. Many times full coverage is not economical because of the high cost of covering the "first dollar" loss.

5. Avoid duplication in insurance. Having one agent handle your insurance will enable that individual to view your problem as a whole and avoid duplication.

6. Buy in as large a unit as possible. Many of the "package policies" are very suitable for the types of small businesses they are designed to serve, and often they are the only way a small business can get really adequate protection.

7. Plan for adequate care and protection of business and insurance records.

8. Review your insurance program periodically (annually or when a major business change occurs) to make sure that your coverage is adequate and your premiums are as low as possible, consistent with sound protection. Continue with a comprehensive loss-prevention program.

9. Keep complete records of your insurance policies, premiums paid, losses, and loss recoveries. This information will help you get better coverage at lower costs in the future.

Review this list before shopping for business insurance. A good insurance consultant will be interested in providing protection for the business within the limits of its ability to assume risk and pay insurance premiums.

This publication is intended to help you to ask the right questions and evaluate the answers as you undertake the task of insuring your business.

Reprinted from *Business for Profit* prepared by Jane Ann Stout and James Meek, Cooperative Extension Service, Iowa State University.

Reviewed by Howard Winslow, Department of Insurance, Columbia, SC.

Prepared by Joyce H. Christenbury, Extension Family Resource Management Specialist, Clemson University

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HE Leaflet 43

HOME-BASED BUSINESS

RECORD KEEPING

The best time to set up a record-keeping system for a home-based business is before you start the business. Experience clearly indicates that the use of an adequate record-keeping system increases the chances of business survival. Too often, those entering a business think they must keep records only because it is required by the Internal Revenue Service. However, accurate and complete financial records can help the owner monitor the business and make plans for the future based on financial knowledge rather than guesswork.

Every business should have up-to-date records that provide the following:

- *An accurate record of the financial performance of the business
- *A vehicle to monitor performance in specific areas
- *Complete and accurate income tax data
- *A basis for sound planning for the future
- *A basis for discussion with partners, potential lenders, and others

The key to successful record keeping is a commitment to a system that is:

- *Simple to use
- *Easy to understand
- *Reliable
- *Accurate
- *Consistent
- *Designed to provide information on a timely basis

However, no matter how simple and easy the system is, it will not happen by magic. You must make it work. Practice the following three rules and record-keeping will be less of a chore.

1. Keep all records in one place.
2. Develop a regular schedule for recording information.
3. Have one person responsible for the books.

WHAT RECORDS TO KEEP

Income The money you receive from sales is income. Your records can help identify the source of income. Receipts can be identified using sales slips, cash register receipts, and invoices. It is helpful to categorize income as received and to keep a separate record of all sales tax collected.

Expenses All funds paid out should be recorded. Each expenditure should be identified according to its use and whether it is a capital or cash expenditure.

Some of the commonly listed expenses are:

-cost of goods sold (raw materials used to make/provide your product)
-vehicle expenses
-advertising
-bank charges, office supplies
-professional dues and publications
-legal and accounting fees
-seminars and training
-interest on business loans
-telephone and utilities
-business insurance
-repairs and labor fees
-other items that are costs of doing business

Accounts Receivable This is a listing of who owes you money and for what. A new business cannot afford extensive credit on the books. Thus, a system must be developed whereby money owed to the business can be collected.

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An Aging of Accounts Record is essential. This means keeping records of when money is due you - for example, 2 weeks, 30 days, 60 days, 90 days, and so on.

Accounts Payable A record of goods or services received on account or credit is called accounts payable. You must pay for these goods and services, so consider them a cost of business.

Inventory Develop a system to record inventory. The increase of inventory is part of your income. One important item to remember in a new business is that you may have a greater need for cash income rather than having increases in inventory value. Cash income and reserves are important for the smooth operation of a business.

Depreciation of Equipment and Fixed Assets Many businesses need equipment, fixtures, and facilities in order to function. The use of these items results in certain loss of value and at some future date these items will need to be replaced. This is a cost of business operations and must be a part of a complete record-keeping system.

Insurance Records Most businesses need liability and property-loss insurance. You will need to keep a record of each coverage, dates effective, and annual premiums.

Payroll Records If you have employees, record-keeping is more involved. It is necessary to keep records of payroll payments including rate of pay; federal, state, and local withholding tax; unemployment tax; worker's compensation; pension plans; and so on.

ESTABLISHING GOOD BUSINESS PRACTICES AND PROCEDURES

The suggestions listed here can help a new business owner simplify the record-keeping process. If these guides are used before the transactions begin to occur, confusion, duplication, and lost IRS benefits can be avoided.

1. Maintain separate business checking accounts, charge accounts, and/or savings accounts. This assures that transactions are clearly identified as business and a supporting document is created for each check written or deposit made. A checking account eliminates the need for cash payments, which are difficult to track and support without records. (A separate checking account is only effective in tracking expenditures if you resist writing checks payable to CASH or yourself.)

2. Pay all bills by check. This is your record of having paid bills and makes it easier to analyze expenditures.

3. Create a petty cash fund. For small expenses it is often practical to pay cash, retain the receipt, and reimburse yourself through a petty cash fund. Be sure to document the receipts and reconcile the fund on a regular basis.

4. Develop a filing system. Keep records supporting items on a tax return until the statue of limitations for that return expires (usually 7 years). If you depreciate or sell an asset, you should keep records that verify your purchase as long as they are needed to figure the basis of the original or replacement of the property. Keep your old tax returns. They help jog the memory in preparing subsequent years' returns.

There are many ways to set up a filing system. Experiment with different methods until you find one that works for you. If you have clients, you will almost certainly need to have information on each person, such as color and style preferences, body measurements, or whatever is appropriate for your product or service. This information fits nicely on index cards or into a computer program. Your business records can be filed in anything from envelopes in a shoe box, to folders in a filing cabinet, to a computer. Start with something simple and modify or expand as needed.

5. Prepare income/deposit/ disbursement procedures. Sketch out the steps you follow when receiving cash, recording, and depositing money. Don't keep cash or checks lying around that can invite theft or loss. Endorse all checks "for deposit only" as soon as you receive them. Put the money to work immediately. Similarly, decide on a routine for receiving bills (or out-standing payables), checking the accuracy of the invoice, paying, recording the expenditure, and filing the documentation associated with the transaction. Set aside time on a monthly basis to review the accounts, balance the business checkbook, and total the income and expenditure accounts.

6. Keep an accurate auto mileage log. Nearly all small business owners are eligible for a vehicle expense deduction.

SELECT A RECORD-KEEPING SYSTEM

A record-keeping system should be as simple as possible so that you use it. Spend some time in a library scanning books that offer basic record-keeping techniques. There is no right or wrong system. At the end of the year, you will need an income statement and related information to complete your tax report. How you organize your record keeping to provide this information is up to you.

The three criteria for a record-keeping system are:

(1) it shows income;
(2) it shows expenses; and
(3) you can understand it.

Sometimes it is best to start with a modest system that can be improved over time. If the method you start with gets too cumbersome, find a way to simplify it.

In part, the type of system you use depends on the characteristics of the business. You will find that two systems are often suggested for sole proprietorships: Single Entry Method and Double Entry Method.

Single Entry Method

This method is handled much like a checkbook-an entry is made each and every time the business receives or disburses money. For owners with few transactions and little need to summarize by categories of expenses, the Single Entry Method may be the best alternative.

The "Cash Receipts Journal" records all the cash you take in. It has columns for various categories of receipts with a line for each receipt including date, source of cash, and total amount. The column categories may be departments or types of merchandise, types of service, or whatever classifications make sense for your business.

The "Cash Disbursements Journal" records the money you spend. It has columns for various categories of expenditures with a line for each expenditure including date, check number, payee, description of expense, and total amount.

The column categories may be merchandise for resale, supplies, interest, rent, salaries, or whatever classifications make sense in your business.

The choice of column categories in both journals is critical to future analysis. Think ahead to what analysis you want and need when establishing categories. All columns in both journals should be totaled each month with year-to-date totals after each month.

Double Entry Method

This system combines the single entry system with additional information to provide you with a more complete picture of your business. Double entry systems include information on cash on hand, equity in building, equipment, accounts payable, mortgages, and loans.

You should have a double entry system if you have significant accounts receivable, accounts payable, depreciable equipment, or inventory. If you envision your business growing rapidly, set up a double entry system from the start.

Journals and ledgers are used with the double entry method to record information in accounts that reflect the needs of your business. Each transaction is recorded twice so the system is self-balancing. For example, you write a check to pay a supplier; in your journals you decrease the cash account and increase the supplies expense account. The total amounts recorded as credits should equal the totals recorded as debits.

If you don't have time or the inclination to learn the double entry method, work with a professional to set up your system. It will be money well spent. Then maintain the system once it is established.

Standardized record-keeping systems can be found in business or stationery stores. The disadvantage of using these is that you may have a tendency to fill in all the blanks on the printed forms even if the information is of no value to you. To save time and money, be certain you record all the information you need and no more.

SELECT AN ACCOUNTING METHOD

There are two basic accounting methods that may be used to record your business transactions: cash and accrual.

Cash Accounting

With the cash accounting method you report income when the money is actually received and report expenses when the bills are actually paid. This accounting method works well for a very small business or a personal service type business with little or no inventory involved.

Accrual Accounting

With the accrual accounting method you report income when it is earned (whether you have received payment or not) and report expenses when they are incurred (whether you have paid for them or not). Charge sales are credited at once to "Sales" and charged to "Accounts Receivable." When the bills are collected, the credit is to "Accounts Receivable." If the production, purchase, or sale of merchandise is an income-producing factor in your business, you must keep inventory records to clearly show income, so you must use the accrual method to record your purchases and sales.

RECORD RETENTION

It may seem premature to worry about record retention during the start up phase of a business, but remember that once records are discarded it is unlikely that they can ever be replaced.

Here are a few guidelines to ensure that you keep the appropriate records.

1. Records directly related to the preparation of tax returns should be kept a minimum of 3 years after the due date of the return. However, it is better practice to keep such records for 7 years should you have to substantiate gross income if a false or fraudulent return is suspected.

2. Keep all tax returns as filed and amended indefinitely because these are difficult to replace even through the Internal Revenue Service. Such returns are often important for carry-overs of tax credits and operating losses.

3. Records that are permanent should be kept in a fireproof file. Examples include cash books, fixed asset and depreciation schedules, general ledgers, journals, and financial statements.

4. Canceled checks, bank statements, accounts payable and receivable records, inventory schedules, payroll records, sales, and invoicing details should be kept 7 years.

RECORD-KEEPING TIPS

All of these suggested procedures can quickly become quite standard with some outside guidance and training from an accountant. Do not become overwhelmed by record keeping, but be aware that it is very important to the ultimate function of a business - to generate sales and produce a profit and return on the investment.

Keep the following tips in mind as you develop your record-keeping system:

1. Get a receipt for everything, even paper and pencils. No receipt = no deduction.

2. Post all expenses regularly to avoid end-of-the-month and end-of-the-year pile up.

3. Simplify record keeping by maintaining accurate, yet uncomplicated, books that balance costs against sales.

4. Write a sales slip for each customer. This serves as their receipt and your record.

5. Use petty cash with care. Write a voucher each time money is used. Careless use of petty cash can take a large bite out of your profits.

6. Be sure to have a business checking account. Pay all bills and deposit business receipts into the account. You can even pay yourself out of this account.

7. Keep all records for 7 years for tax purposes.

References:

Cotton, John. *Keeping Records in Small Business*, Small Business Administration Management Aid 1.017, 1985.

Home-based business materials from the Cooperative Extension Service in New York, Michigan, Ohio, and Iowa.

Prepared by Joyce H. Christenbury, Extension Family Resource Management Specialist, Clemson University

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City of Greenville Business Requirements

☑ Zoning

Once a location for a business has been selected, check with the Zoning Officer to make sure the use is allowable under the zoning classification. The Zoning Officer is located on the 8th Floor of City Hall. Call 240-4557.

☑ Occupancy Permit

You must obtain a Certificate of Occupancy before moving into a new or existing building. An application for a Certificate of Occupancy can be obtained from the Building Department, 8th Floor, City Hall. Call 240-4555.
To apply for a permit you will need the address of the property, square footage of the building, and the nature of the business. The Building Department will arrange for an inspection of the property. There is a $20.00 processing fee.

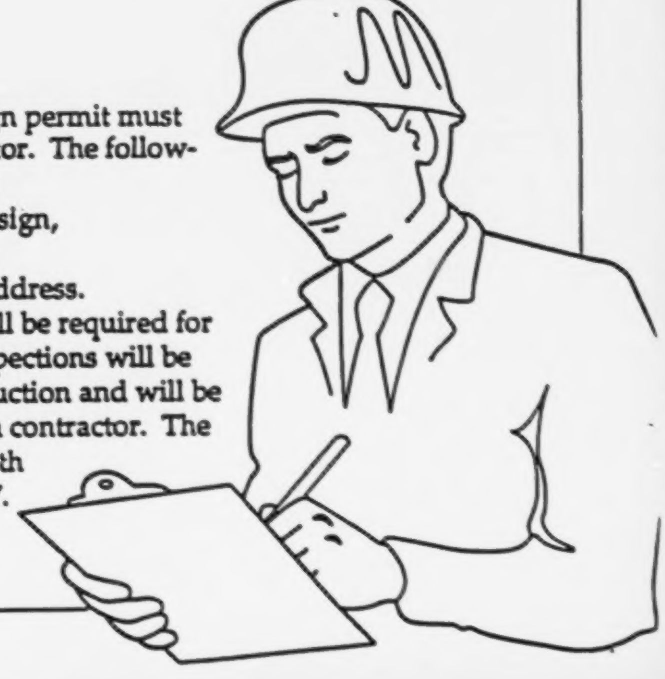
☑ Business License

A business license must be obtained and a license fee paid prior to opening a business in the City. The business license fee is based on gross receipts and is renewed each January. The fees are pro-rated for business start-ups occurring after January.

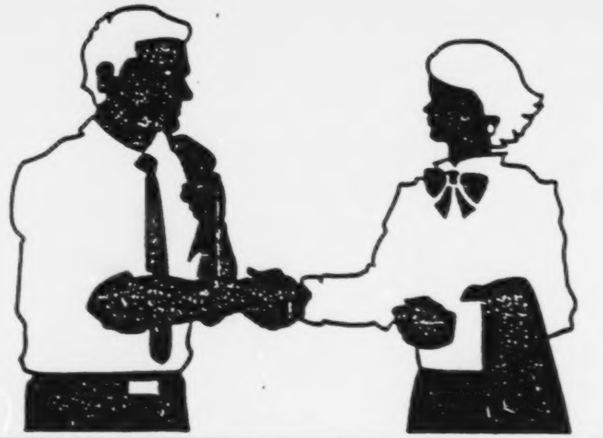
A business license and occupancy permit should be applied for at the same time. The Business License Office is located on the 2nd Floor of City Hall. Call 240-4405.

☑ Sign Permit

If a business requires a sign, a sign permit must be obtained from the sign inspector. The following information will be required:
-location and size of a proposed sign,
-number of existing signs,
-property owner and property address.
A waiting period of one week will be required for processing each application. Inspections will be required during and after construction and will be arranged by the applicant or sign contractor. The Sign Inspector is located on the 8th Floor of City Hall. Call 240-4557.



BUSINESS SERVICES OFFERED BY THE CITY



Burglar Alarm

A business can connect directly to the Police Department for 24-hour monitoring. The application fee is $60.00 and the annual service charge is $100.00. For information contact the Police Department at 271-5215.

Fire Alarm

A business may, with an electronic telephone or mechanical fire alarm system, connect to the City's fire alarm system and receive 24-hour monitoring. The annual service charge is $60.00. For more information, contact the Fire Department at 240-4445.

Sanitation Department services

Businesses using roll carts are serviced once a week. Businesses using front-loading containers are charged a fee of $.75 per cubic yard collected in excess of a base level of 2 cubic yards per week. Businesses also have free access to the City's landfill.

Police Department services

The Police Department conducts security surveys for both residences and businesses. The Crime Prevention Unit will evaluate your property and make suggestions to improve security. They also provide seminars on shoplifting prevention, employee theft, and management of retail security. For more information, call the Safety and Crime Prevention Unit at 271-5359.

Fire Department services

The Fire Department provides fire prevention inspections on a regular schedule and will provide special inspections upon request. The Fire Prevention Bureau also provides lectures and demonstrations on fire safety, fire prevention, and use of fire extinguishers. For more information, call the Fire Prevention Office at 240-4450.

Economic Development Department services

The Economic Development Department provides various technical services to businesses. These services include assisting in developing business plans and developing pro formas, negotiating with financial institutions, locating sites for relocation and expansion, and providing economic data. There are also special renovation loans available in selected areas. For more information, call the Economic Development Department at 240-4401.

Changing America: The New Face of Science and Engineering

Interim Report

The Task Force on Women,
Minorities, and the
Handicapped in Science and
Technology

330 C Street S.W.
Washington, D.C. 20201
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September 1988

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Preface

The Task Force on Women, Minorities, and the Handicapped in Science and Technology:

Established by the U.S. Congress in Public Law 99-383, Section 8, to report to the President, the head of each participating Federal agency, and the Congress;

Members are from 15 Federal agencies and leaders in the private sector and education;

Purpose is to develop a long-range plan for broadening participation in science and engineering;

Public hearings held in Albuquerque, Atlanta, Baltimore, Boston, Chicago, Kansas City, and Los Angeles between Fall 1987 and Spring 1988;

An interim report with recommendations is now being issued to emphasize that action rather than more study is needed;

Task Force report due again in December 1989 on progress being made toward implementation of the recommended plan;

The Task Force terminates on January 31, 1990.

Cochairs of the Task Force are:

Dr. W. Ann Reynolds
Chancellor of the California State University System

Mr. Jaime Oaxaca
Corporate Vice President of Northrop Corporation

Executive Summary

Our advanced industrial Nation—the America we have taken for granted for more than a generation—is changing.

Our society is changing: More people are old, fewer are young, more come from minority groups.

Our industry is changing: We are not the world economic leader we were for so long, but a competitor with other industrial nations.

Our education system is changing: Although our colleges and universities are the envy of the world, they are becoming more and more dependent on foreign students and faculty. Our precollege education system has reached a crisis state in which U.S. students are no longer competitive with those in other industrialized countries.

Our present scientific and engineering workforce—the foundation for U.S. technological, economic, and military leadership—is eroding due to retirements and declining student interest.

As a result, the Task Force now reports to the President, the Congress, and the American people that one of our most urgent tasks is to strengthen our science and engineering workforce. The educational pipeline— from prekindergarten through the Ph.D.—is failing to produce the workers needed to meet future demand. Indeed, unless parents, schools, colleges, professional societies, industry, State legislatures, Federal agencies, the President, and Congress act in concert, our national science and engineering workforce will continue to erode and the prospects for maintaining an advanced industrial society will diminish.

In the year 2000, 85 percent of new entrants to the Nation's workforce will be members of minority groups and women. Meanwhile the number of people with disabilities who can go out into the workplace will rise. These three groups have historically been underrepresented in science and engineering. The Nation can meet future potential shortfalls of scientists and engineers only by reaching out and bringing members of these underrepresented groups into science and engineering. America's standing and competitiveness depend on it.

Findings of the TaskForce

The Nation's leadership in science and engineering cannot be maintained unless the education pipeline from prekindergarten through graduate school is repaired so it can yield a larger and more diverse group of world-class scientists and engineers at all levels.

The factors— racism, sexism, and prejudice against people with disabilities— that have limited opportunities for many in America are also narrowing access to science and engineering careers.

Until now, the role of minorities, women, and people with disabilities in science and engineering has been widely seen only as an equity issue, rather than as the key to future national strength in science and technology.

Universities are not enrolling and graduating enough American students in science and engineering, especially those from underrepresented groups, to ensure our ability to meet demands for American scientists and engineers. Universities do not complement large enrollments of foreign graduate students with large enough numbers of Americans.

Federal agencies have not recognized or begun to address the demographic changes that are eroding the science and engineering workforce and which will affect the conduct of the Nation's research and development efforts in the 21st century.

Federal agencies have not been sufficiently interested in the issue to identify the impact of the $60 billion Federal research and development budget on underrepresentation in the Nation's scientific workforce. Programs for underrepresented groups were designed with equity as the goal, not with the goal of strengthening the Nation's science and engineering workforce.

Effective local intervention programs are demonstrating that young people from underrepresented groups can become quality scientists and engineers. However, such programs are too isolated and underfunded to meet national demand.

The entertainment industry—television, radio, movies, music—has an enormous impact on the minds and imaginations of youth. Some entertainment stimulates interest in and awareness of mathematics and science, but much entertainment sends negative images. Efforts to improve national mathematics and science achievement will not be successful unless the entertainment industry assists in bringing more young people through the education pipeline.

Industry has been active in the effort to raise high school graduation requirements and to support minority college students, particularly in engineering. However, long term, sustained, and systemwide activities are now in order.

Goals for the Nation

Goal #1

Changing America: The Nation should adopt the goal that all children born today, from all backgrounds, have a quality education, including mathematics and science education and the opportunity to participate in the science and engineering workforce to their fullest potential.

Goal #2

PreK-12 Education: The Nation should reform the preK-12 education pipeline so that our children's mathematics and science competence is better than that of students in countries with which we compete.

Goal #3

Higher Education: The Nation should increase the number and diversity of American students graduating in science and engineering. By the year 2000, we should produce enough professionals in these fields, including more from underrepresented groups, to meet the demand for faculty and for industry and Federal personnel.

Goal #4

Federal Research and Development: Federal research and development funds influence the Nation's entire science and engineering effort. They generate new knowledge, and employ and train scientists and engineers. These funds should be leveraged to help develop a more diverse, world-class generation of scientific and engineering workers by the year 2000.

Goal #5

Federal Employment: The Federal Government should continue to be a pacesetter in developing a work environment that is accessible, equitable, and favorable in attracting and advancing groups underrepresented in science and engineering.

Goal #6

Influence of Culture: Our Nation's future hinges on having an ample supply of people who achieve in mathematics and science, are science-literate, and perform technical jobs with world-class competence. The entertainment industry and the mass media— powerful influences in shaping society's values— must participate in reshaping popular attitudes toward science and engineering.

Highlights of Recommended Actions

Create a National Action Council on the Science and Engineering Workforce comprised of our country's highest leaders and charged to ensure that all sectors work actively to broaden participation in the Nation's science and engineering workforce.

School boards should ensure that teachers, principals, and counselors create a school and classroom climate of high expectations in mathematics and science for all students, particularly those from underrepresented groups.

Federal funds should be provided for improvement in mathematics and science educational achievement to school districts with significant enrollment of minority students.

University presidents should lead in creating a climate of action and accountability that accelerates the participation of underrepresented groups in all aspects of their institutions.

Universities should set quantitative goals for recruiting, retaining, and graduating more U.S. students in the sciences and engineering, especially from underrepresented groups. Science and engineering departments should set similar goals and take responsibility for ensuring that more students from these groups attain doctorates and obtain faculty positions. Forgivable educational loans could be provided to students from these groups who agree to pursue faculty careers.

The Federal government should initiate a National Research Scholars Program in Science and Engineering to increase the number and diversity of students earning the bachelor's degree in science and engineering; and establish a National Graduate Student Research Opportunities Program offering fellowships and research assistantships in science and engineering to members of minority groups, women, and students with disabilities. These should be linked to the National Research Scholars Program to ensure continuity of support for these students.

States should establish a Scholar Incentive Program so that the top high school graduates in underrepresented groups can major in science and engineering at any public education institution in their State.

States should link articulation between 2-year and 4-year institutions so that 2-year college students would be encouraged to obtain the bachelor's degree in science and engineering.

Federal agencies should assess the impact of their entire research and development budget on the development of the Nation's science and engineering workforce. Within one year each agency should also develop plans for significantly diversifying the science and engineering workforce.

Federal agencies should include more women, minority group members, and persons with disabilities on their science- and engineering-related advisory committees.

Federal agencies that employ scientists and engineers should continue to recruit, train and advance more from underrepresented groups.

Industry should continue to sound the alarm about how weak educational preparation of our youth contributes to the declining economic competitiveness of the United States, and support the national goal to raise the quality of mathematics, science, and computer instruction and student achievement, particularly for underrepresented minorities, women, and individuals with disabilities.

Industry should provide summer work and research opportunities to high school students from underrepresented groups and their teachers so they obtain hands-on experience and see practical application of the technical theories taught in the classroom.

Industry should join and support alliances with Federal agencies and minority and majority universities aimed at increasing the number of graduates and researchers who are minority group members, women, or people with disabilities.

A task force of representatives from the entertainment industry should be established to report in the next 18 months on how its industry, along with the mass media, can spark the imagination and values of all Americans to reach the six national goals set forth in this report.

I. Changing America

Science and engineering workers are vital to our advanced industrial society. But by the year 2010, we could suffer a shortfall of as many as 560,000 science and engineering professionals. As a result, America's economic strength, security, and quality of life are threatened.

The percentage of young Americans preparing for careers in science and engineering has been declining steadily. Our most experienced scientists and engineers, recruited after Sputnik, will be retiring in the 1990s. Meanwhile, by the year 2000 the number of jobs requiring college degrees will increase dramatically. The educational pipeline—from prekindergarten through the Ph.D.—is failing to produce the scientifically literate and mathematically capable workers needed to meet future demand.

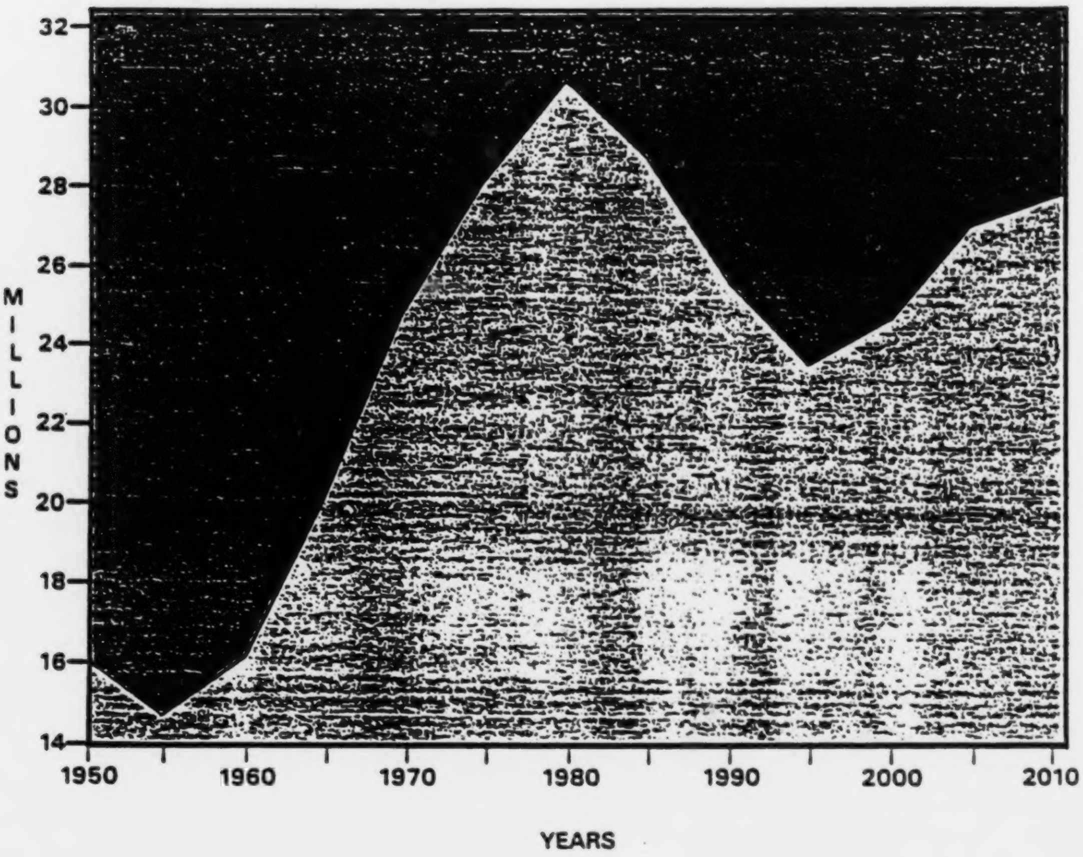
America is changing particularly in the composition of its young. Blacks and Hispanics are now 25 percent of our schoolchildren; by the year 2000, they will be 47 percent. This change has already occurred in some regions, such as California, New Mexico and Texas.

Thus, America is today a different country demographically from the one that produced earlier science and engineering feats. By the mid-1990s there will be fewer young people to enter the workforce, and these scarce young workers will have to be highly productive to keep our economy growing and maintain our standard of living. This means they will have to be versatile and well-educated, and if we are to continue as an advanced industrial society and world leader, many must join the science and engineering professions.

Since the early 1980s, the proportion of U.S. freshmen choosing science and engineering majors in college has been wobbling downward. The drop has been little noticed because many foreign students have been enrolling in these fields; in addition, colleges have been making up total enrollments with older and part-time students who tend not to graduate in science and engineering. If these trends persist, America will graduate fewer U.S. bachelor degree holders and, subsequently, even fewer Ph.Ds. in science and engineering.

Figure 1

18 to 24-Year-Olds in the U.S. Population, 1950-2010



Between 1980 and 2000 the 18 to 24-year-olds in the U. S. population will decline by 19 percent while the overall population will increase by 18 percent. By 2010, one in every three 18-year-olds will be Black or Hispanic, compared to one in five in 1985.

Source: U.S. Census Bureau.

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We must find ways to bring many more young people— particularly those from underrepresented groups— into engineering and science. They must receive sound mathematics and science instruction in school, aspire to college, qualify for these majors at college, and complete their degrees. More baccalaureates must stay on as graduate students, as postdoctorals, and as teachers of future science and engineering students. Changing the mathematics and science interest and achievement of a generation of students is a huge task. It requires changing America.

We should commit to the task of producing a world-class science and engineering workforce not only because science and technology happen to be the coin of international power. We should take action not just because Japanese students score higher in international tests. We should take action not only because the opportunity costs of not acting— school dropouts, welfare, and prisons, for example— are staggering. We have two other powerful reasons:

One, every American citizen, regardless of background, gender, physical disability or race, should receive the educational and economic opportunity to develop to his or her fullest potential.

Two, we should extend these rights not only in the name of social justice, but as a test of a modern, well-functioning society. This is the standard by which we should continue to stand and be measured.

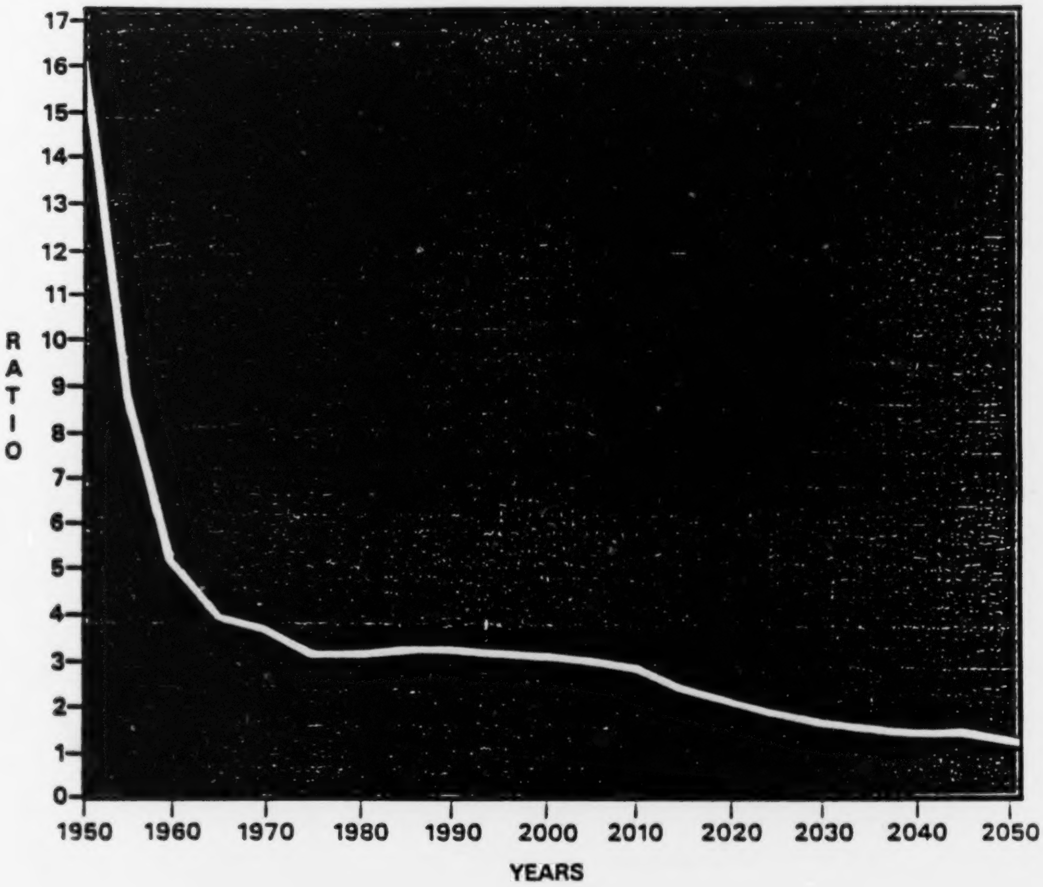
Because America is changing, we, in turn, must change America.

GOAL #1

The Nation should adopt the goal that all children born today, from all backgrounds, have a quality mathematics and science education and the opportunity to participate in the science and engineering workforce to their fullest potential.

Figure 2

Ratio of Workers to Social Security Beneficiaries, 1950-2050



The declining young population and increasing elderly population means that by 2050 there will be approximately one worker for each social security beneficiary. Presently the ratio is about three to one.

Source: U. S. Department of Health and Human Services.

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Action: We respectfully suggest that the President articulate this goal. A National Action Council of our country's highest leaders should be created and charged to serve for 5 years to ensure that all sectors actively work to broaden participation in the Nation's science and engineering workforce. Council members should be made up of Federal agency heads, chief executive officers of industry, presidents of universities, heads of school systems, chairs of foundations, State governors and mayors. The Action Council should coordinate relevant programs, monitor progress across the Nation, and report yearly to the President, Congress and the American people.

Action: To highlight industry's participation in meeting all six National goals set out in this report, we respectfully suggest that the President convene an annual meeting of chief executive officers of leading U.S. corporations to report on the state of the Nation's science and engineering workforce and the efforts of the business sector to develop a fully competitive workforce for the 21st century.

Action: Each State should exercise leadership in raising the quality of mathematics and science instruction and student achievement at the elementary and secondary levels. States should also take the lead in ensuring that their colleges and universities recruit and graduate sufficient numbers of students in sciences and engineering, especially from underrepresented groups.

Action: Professional societies should play a more active role in encouraging young people, especially from underrepresented groups, to pursue the study of mathematics and science. Programs offering financial assistance, summer work experience, career guidance and mentoring are particularly useful.

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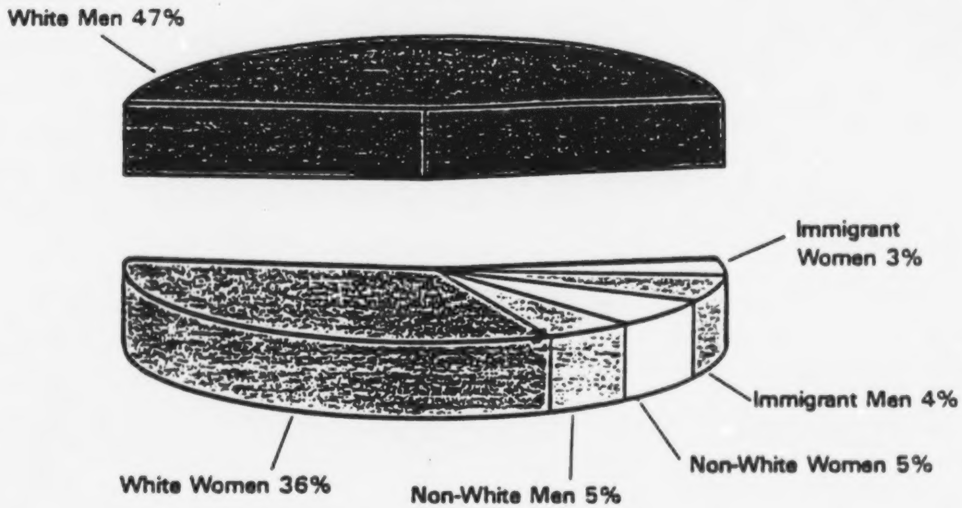
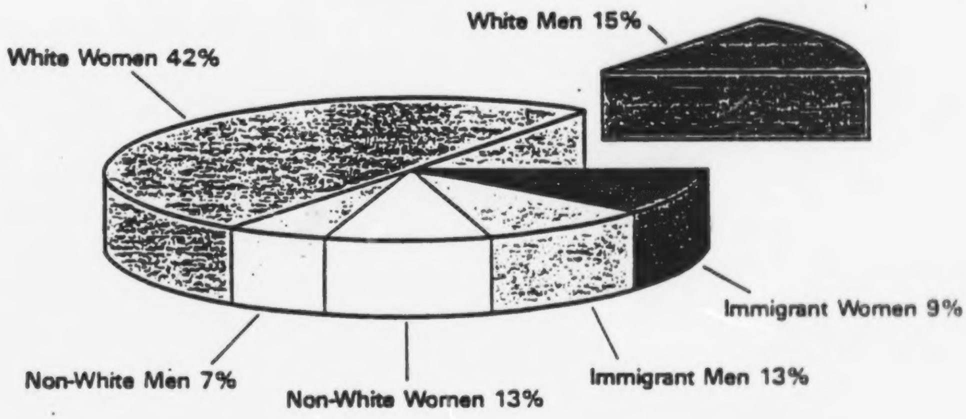
Figure 3

The Changing Labor Force, 1985-2000

1985 LABOR FORCE
115,461,000



NET NEW WORKERS, 1985-2000
25,000,000



Changing demographics will markedly affect the composition of the future workforce. Of the new workers entering the labor force by the year 2000, only 15 percent will be white men, and the rest either white women, members of minority groups, or immigrants.

Source: U.S. Department of Labor.

II. PreK-12 Education

A child born today will be in the sixth grade in the year 2000. That child will graduate from high school in 2006, from college in 2010, and enter the workforce when our society is about equally divided between young and old. These children will live in a world in which science and engineering will be crucial to the workplace and the economy, the conduct of public affairs, and the way we lead our private lives. Ignorance of mathematics and science—or fear of it—will hinder these children as workers and citizens.

Because children start to become engineers, scientists, or science-literate early in life, we should provide preschool programs that lay the groundwork for academic skills. This is especially important for the 14 million children who live in poverty, one-third of whom are from minority groups.

Minority students are concentrated in large urban school districts. These students tend to drop out of college-track mathematics and science early. These schools suffer from chronic shortages of good mathematics and science teachers, little or no hands-on laboratory science, and low teacher expectations. The situation is a Catch-22 for students who do not believe they can learn and, therefore, decide to avoid "hard" courses. The result is not only lower achievement scores for the Nation as a whole, but personal hardship for those students who have not been taught the skills they need to take full part in our advanced industrial society.

We know the key points at which most students in the United States drop off the mathematics-science pipeline. Junior high school is one. The decisions about which mathematics and science courses to take at this time could foreclose choices later. The little science presented is frequently taught by rote, and texts are often out of date. We emphasize the need for improvements in the science and mathematics preparation of all of our students, especially in the K-8 educational pipeline.

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Industry

Industry is the Nation's largest research performer: it consumes three-fourths of all research and development dollars and employs two-thirds of our scientists and engineers, or 2.6 million people. Industry leaders have long known how central the science and engineering disciplines are to their success. Now they are facing up to the demographic issues that threaten their workforce. Many companies have been active in the effort to upgrade the workforce and reach out to groups who will be entering the labor force in the future. Business has been active in State movements to raise high school graduation requirements, including those in mathematics and science. Several companies support minority engineering programs and contribute to other intervention programs.

Long-term, sustained, and systemwide changes are now in order.
Industry, therefore, should:

Continue to sound the alarm about how weak educational preparation of our youth contributes to the declining economic competitiveness of the United States, and support the national goal to raise the quality of mathematics, science, and computer instruction and student achievement, particularly for underrepresented minorities, women, and individuals with disabilities.

Through their industrial foundations, provide college scholarships and fellowships to members of underrepresented groups who are motivated to major in science and engineering and to teach those subjects at precollege and college levels.

Join and support alliances with Federal agencies and minority and majority universities aimed at increasing the number of graduates and researchers who are minority group members, women, or people with disabilities.

Provide summer work and research opportunities to high school students from underrepresented groups and their teachers so they obtain hands-on experience and see practical application of the technical theories taught in the classroom.

Hire increasing numbers of people from underrepresented groups into scientific and technical positions.

Promote and advance members of underrepresented groups through increasing levels of supervisory and managerial responsibilities, with special attention to removing the "glass ceiling," or invisible barrier, to their progression into senior management.

Provide paid leave for employees to teach at precollege and college levels.

Mobilize a national campaign for at least 5 years to increase science literacy and to show that mathematics, science, and technical learning are important to our country's well being and valuable in many kinds of careers.

The pattern of low expectations continues in high school, when students generally can choose general mathematics instead of college preparatory mathematics. For example, girls may consider physical science and mathematics to be male subjects and may not enroll in those classes without specific encouragement from parents, teachers and counselors. Students with disabilities frequently do not take laboratory science because of discouragement from teachers. Consequently, U. S. elementary and high school students take fewer math and science courses and learn less than do students in most other developed countries. As a result, they score very low on international tests of these skills and on national achievement exams. In 1988, for example, only 48.5 percent of U.S. 17-year-olds could pick the right multiple choice answer to the question: What is the area of a rectangle 4 cm by 6 cm?

We should change the climate in which students learn and teachers teach mathematics and science. We should instill the expectation— in parents, teachers, principals, and students— that students of all backgrounds can learn and be at ease with mathematics and science. These improvements require systemic change.

We commend the many schools that have begun to remedy this situation. The Education Commission of the States reports that since 1980 at least 45 states and the District of Columbia have strengthened graduation requirements. Generally, mathematics and science courses have led the increase. Three years of mathematics is the goal of these efforts. The momentum should continue.

To meet raised expectations of parents, teachers, and students, we need human and financial resources. School districts must have practical and systemic plans to raise mathematics and science achievement levels. They can be assisted by the Federal Government in ways that preserve the Federal Government's limited role.

Intervention programs, if replicated with care and given stable funding, can make a difference. For example, the Southeastern Consortium for Minorities in Engineering (SECME), sponsored by 27 universities and 45 corporations, coordinates intervention programs across the southeast United States to reach over 200 schools, 27 universities and 45 corporations, and approximately 15,000 minority students a year.

Parents

To provide all children, from all backgrounds, **with a quality mathematics and science education and an opportunity to join the science and engineering workforce, we must reach parents.** Parents shape the aspirations and values of children and influence their achievement in school. A prime objective of outreach to parents would be to offer parents and children a chance to learn together.

Simple aids, such as a pamphlet for parents called "Get Into the Equation" published by The College Board, are explaining why mathematics and science are important tools and how parents can help their children gain mastery of these subjects. It tells parents what toys to provide, what courses children should take in school, and how to interact with the school.

Linkages, developed by the American Association for the Advancement of Science, uses foundation funds to form community-based partnerships between schools, parents, community organizations, and even churches. Its aim is to improve the mathematics and science achievement of children-at-risk. In 3 years, it has reached an estimated 30,000 parents.

Family Math, developed at the Lawrence Hall of Science, Berkeley, gets parents and young children to learn math together and involves parents with their children's schools. In the last 5 years, Family Math reached 34,000 families.

Many science museums provide learning experiences for children and their parents. Some museums are also mounting targeted programs – for example, the camp-ins for Girl Scouts at the Center of Science and Industry at Columbus, Ohio; the programs linking the Girls Clubs of America and the Boston Science Museum; and exhibits such as "Black Achievers in Science" and "My Daughter the Scientist" at the Chicago Museum of Science and Industry. Museum facilities are frequently modified to accommodate people with disabilities, including easy access and technical aids for blind and hearing-impaired visitors.

The Comprehensive Math and Science Program (CMSP) in New York City randomly selects students in 9th grade and, using in-service teachers, offers them 4 years of college preparatory mathematics, including calculus. CMSP has reached more than 6,000 students to date. On New York State Regents mathematics exams taken in 1987, twice as many CMSP students as non-CMSP students passed. The program is being extended to some schools in Atlanta, Georgia.

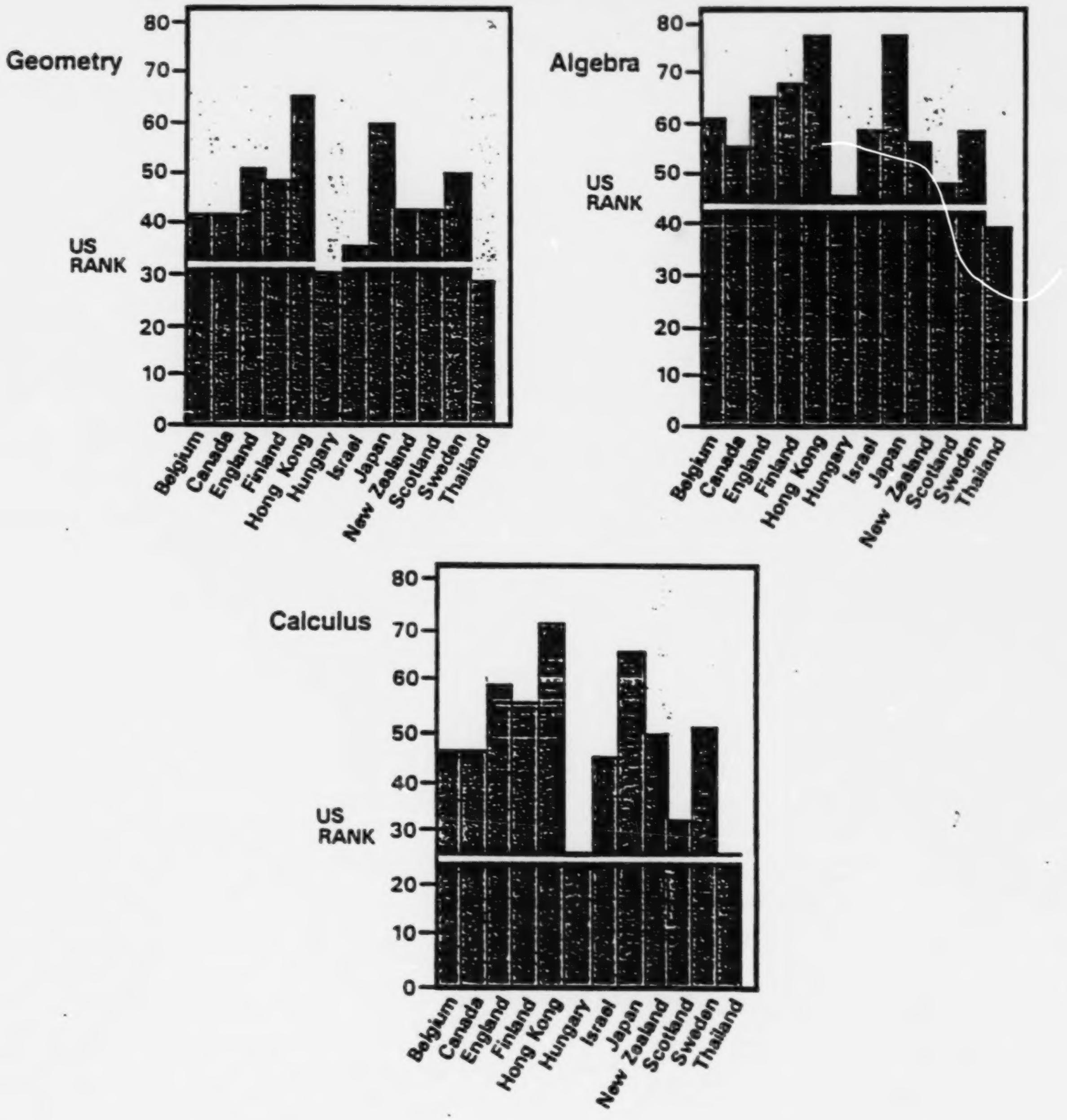
GOAL #2:

The Nation should reform the PreK-12 education pipeline so that our children's mathematics and science competence is better than that of students in countries with which we compete.

Action: PreK children can be helped if their parents – particularly those of children in poverty – understand the importance of mathematics and science education. Parents should hold schools accountable for raising student achievement levels in mathematics and science. Present community-based programs that stress parent outreach, should be extended. All children should have regular access to informal learning experiences in science museums and library media centers.

Figure 4

Twelfth Grade Scores on International Math Achievement Tests



Compared with students from other countries, U.S. students score in the lower end of the scale on mathematics achievement tests.

Source: International Association for Evaluation of Educational Achievement.

Action: To raise levels of mathematics and science achievement by minority students, educational reform should target the 25 largest school districts which enroll 60 percent or more minority students. Such districts should undertake a systemwide assessment of mathematics and science education and develop a plan for making student achievement better than that of students in nations with which we compete. The Federal Government should establish a competitive grants program for school districts to implement these plans, and continued funding would be dependent on measurable improvements in achievement of students.

Action: The maximum number of students—especially minority and women students and students with disabilities—should take college-track mathematics and science. High schools should require 3 years of mathematics including precalculus, and plan to require 4 years, including calculus, as soon as possible. Three years of laboratory science and one year of computer science should be required for graduation.

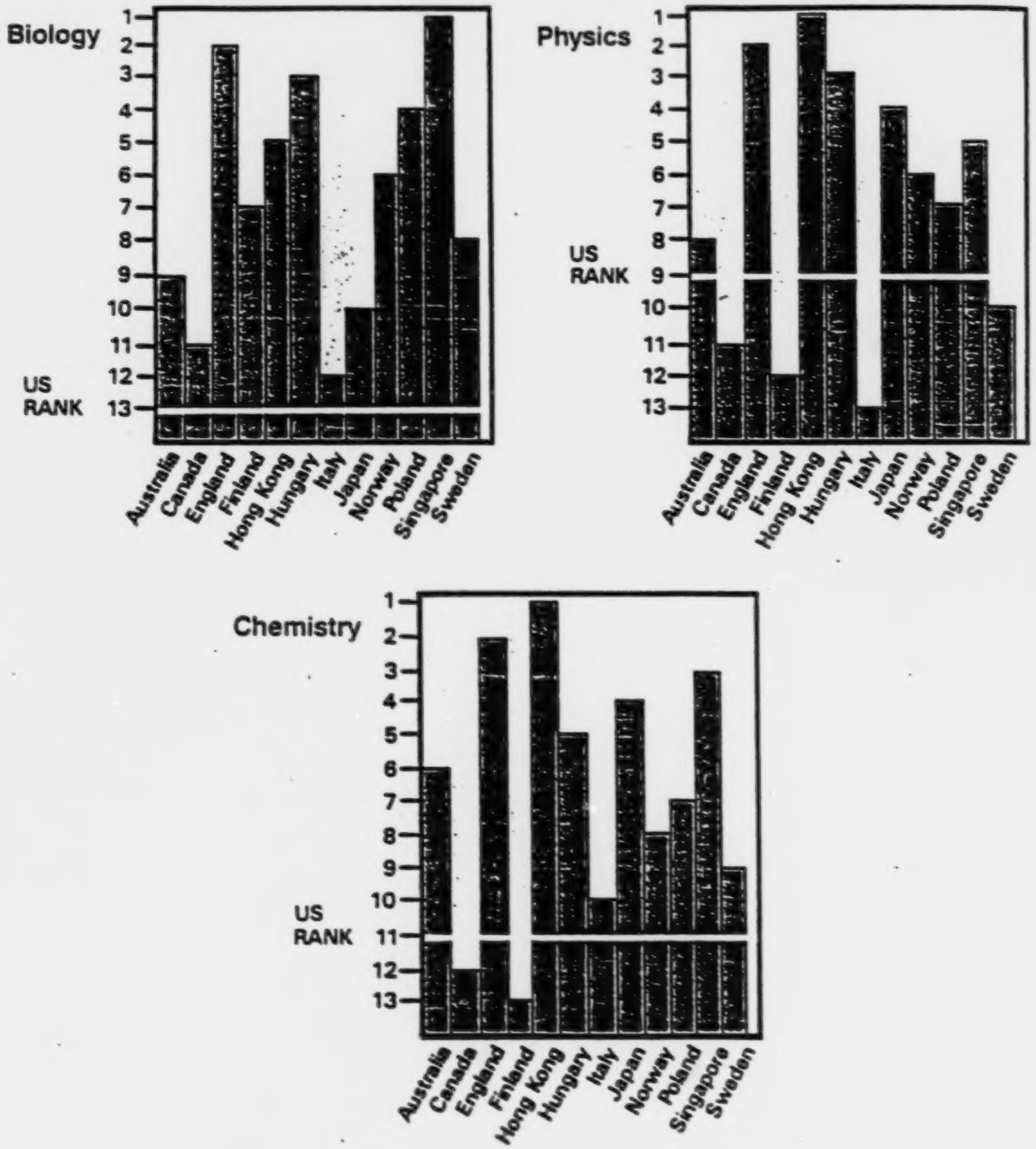
Action: Teachers and counselors should encourage students with disabilities to take laboratory science courses. Schools should provide technical aids and appropriate teaching to minimize physical barriers to achievement by students with disabilities.

Action: Teachers, principals, and counselors should create a school and classroom climate of high expectations in mathematics and science for all students, particularly for those from underrepresented groups.

Action: Professionalism of mathematics and science teaching should be accelerated through teacher institutes, workshops, retraining, and participation in Federal research projects.

Figure 5

Twelfth Grade Scores on International Science Achievement Tests



Among the 13 countries participating in these science achievement tests, U.S. students scored 13th in biology, 11th in chemistry, and 9th in physics.

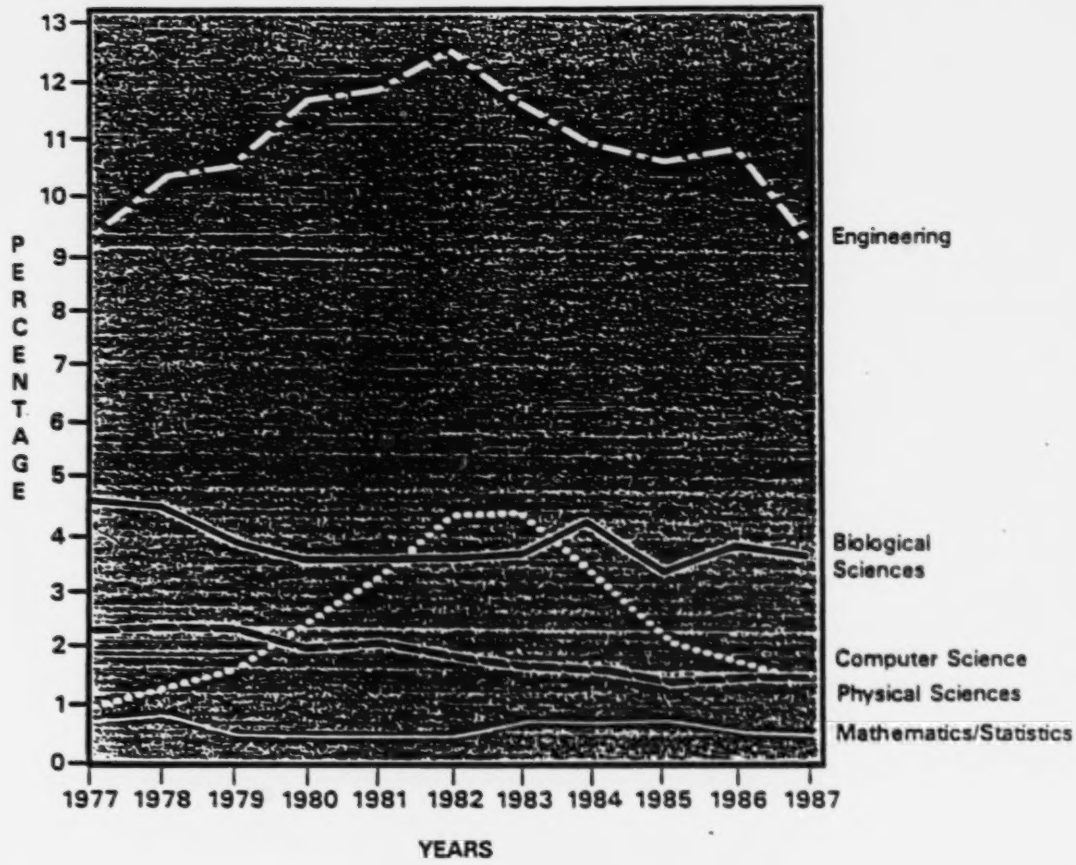
Source: International Association for Evaluation of Educational Achievement.

Action: To increase the present workforce of good science and mathematics teachers nationwide, forgivable educational loans should be made widely available to students who agree to become mathematics and science teachers. Scientists and engineers retiring from universities, Federal service and industry should be an important teaching resource in the 1990s. Industry and the Federal Government should be encouraged to permit employees to take paid leave to teach and counsel students in mathematics and science.

Action: Effective intervention programs should be expanded. If evaluated and replicated with care, and provided with secure funding, they can alleviate specific problems at the local level. However, they alone cannot solve the national effort to raise student mathematics and science achievement.

Figure 6

Student Interest in Science & Engineering, 1977-1987



Freshman interest in science majors has declined by one-third over the past two decades; the largest drop occurred in mathematics and the physical sciences. Interest in engineering is down by one-quarter since 1982, and interest in computing careers has fallen by more than two-thirds in four years.

Source: U.C.L.A. Higher Education Research Institute.

III. Higher Education

Our colleges and universities train our Nation's science and engineering workforce and perform cutting-edge research. They have a key role in producing an adequate supply of science and engineering degree-holders to meet demand, and in giving all groups in society access to the skills and knowledge that make America great. Fulfilling these responsibilities is especially important in a period of large-scale demographic change.

Although the number of women, Blacks, Hispanics, and American Indians in science and engineering increased through the early 1980s, the absolute numbers were small, and they are now declining. In addition, since 1983, fewer freshman overall have been planning to major in science and engineering, so the percentage of science and engineering degrees awarded will continue to drop.

The declining enrollment of U.S. graduate students is masked by recent high enrollments of foreign students in these fields, especially engineering. Today, 75 percent of the graduate students receiving financial support from university engineering departments are foreign nationals. The large presence of foreign nationals in these departments affects who are put on research teams, who receive fellowships and research assistantships, and who are eligible to become faculty members. The cultural attitudes of foreign students, particularly if they are instructors, may even discourage some Americans, such as women, from taking science and engineering courses.

Graduate departments in the United States not only train relatively fewer Americans, but they train even fewer graduate scientists and engineers who are Black, Hispanic, American Indian, or female. In 1986, 3,376 Ph.D.s were awarded in engineering by U.S. universities. Of this number, 1,661 went to U. S. citizens including, 139 to women, 25 to Hispanics, 14 to Blacks, and 6 to American Indians.

Blacks

Composition.

Blacks are 12 percent of the American population and 2 percent of all employed scientists and engineers. They earn 4 percent of the baccalaureates and one percent of the Ph.D.s in science and engineering. In 1986, only 89 Blacks who are U.S. citizens earned the Ph.D. in science, and 14 earned that degree in engineering.

Background.

Blacks started to enter the fields of science and engineering in increasing numbers in the 1970s, when minority engineering programs were launched at several majority institutions. Soon, Black undergraduate engineering enrollments rose, from 5,508 in 1973 to 17,994 in 1985, although this trend has reversed in the last year when the number declined to 16,803.

The pipeline.

As with other groups still underrepresented in science and engineering, the educational system turns many Black students away from these fields early in life. This is due, in part, to the fact that most Blacks are enrolled in the large city schools where teaching is below par. In 1984, for example, the population of the 25 largest school districts in the United States was 41 percent Black. Thus, test scores for Black students overall remain low despite the increasing movement of Blacks to higher socioeconomic levels.

Many Black students graduating from high school are deterred from entering college by the prospect of assuming loans that are sometimes equal to a family's entire annual income. Most Blacks who enter science and engineering do so through selected Historically Black Colleges and Universities (HBCUs). A large percent of the Blacks who have received advanced degrees in science and engineering elsewhere did their undergraduate work at these institutions. Nearly all Blacks who get bachelors' degrees in science and engineering take jobs immediately upon graduation. Few stay on for graduate study.

Model programs.

Intervention programs are beginning to provide the kind of support Black students need to pursue the science and engineering professions. The Illinois Institute of Technology's minority engineering program, for example, graduates about 70 percent of the entering freshmen minority students compared to the nationwide average of 30 percent. This high rate is attributable to: concerned leadership from the president of the institution; careful selection and training of faculty and staff; and the use of older student counselors who tutor newer students and help them understand the system. The National Consortium for Graduate Degrees in Engineering (GEM) similarly supports students to pursue graduate degrees.

Although women enter graduate school at about the same rate as men, they are considerably less likely than men to reach the Ph.D. They tend to be self-supporting rather than supported by the graduate departments. They cluster in the biological and health sciences.

These trends among the traditionally underrepresented groups need not continue; they can be reversed. On campuses where change has occurred, the presidents, deans, and department heads have provided strong leadership.

At the traditionally male Massachusetts Institute of Technology, for example, women have made up 38 percent of all freshmen for the past 3 years. As a result of institutional leadership, 100 of its 950 faculty are women. To encourage women to pursue research careers, MIT offers fellowships and other programs that carry high prestige and have helped many young women pursue academic research careers.

But colleges and universities cannot reach out to all groups, particularly the rapidly growing Black and Hispanic student pool, without first having faculty who themselves are from underrepresented groups. Graduate departments are cultures in themselves. These cultures must be changed to reflect and attract the traditionally underrepresented.

GOAL #3:

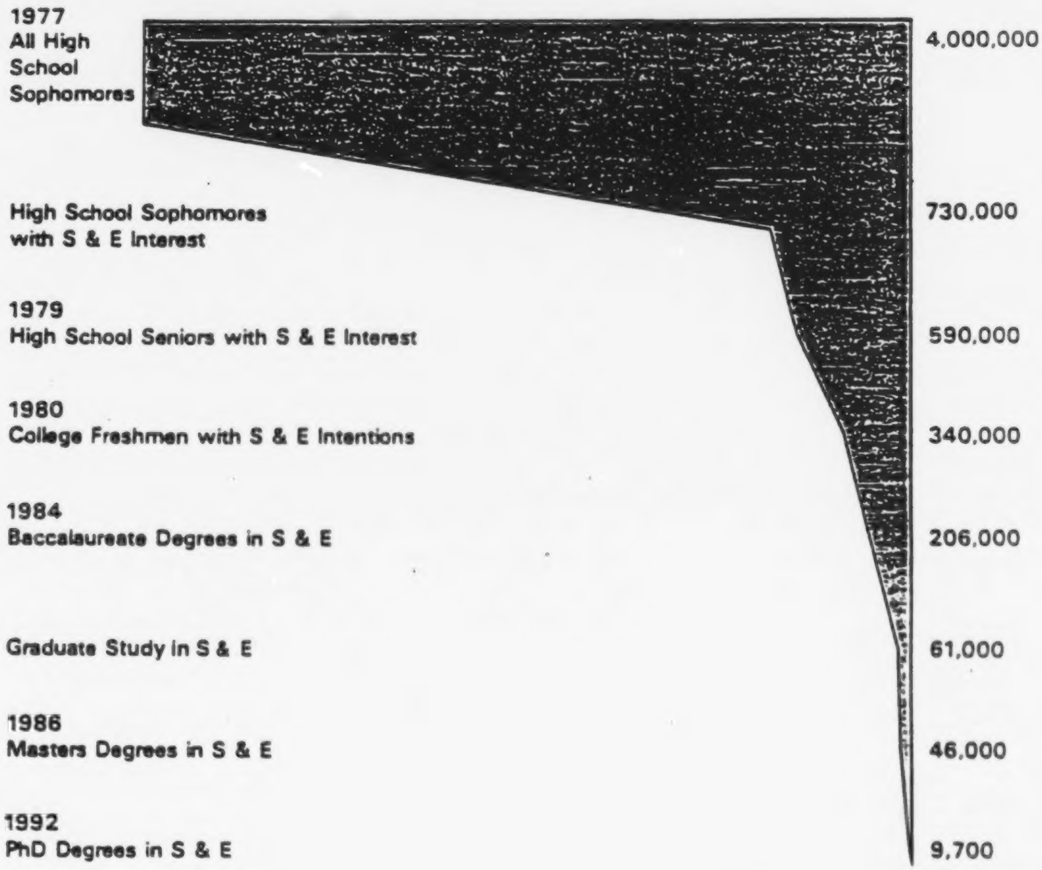
The Nation should increase the number and diversity of students graduating in science and engineering. By the year 2000 we should produce enough professionals, including more from underrepresented groups, to meet the demand for faculty and industry and Federal personnel.

Action: Universities and colleges should:

Through their presidents, lead in creating a climate of action and accountability that accelerates the participation of underrepresented groups in all aspects of their institutions.

Figure 7

Science & Engineering Pipeline, from High School through Ph.D. Degree



Analysis of the 4 million students in the 10th grade in 1977 shows the pattern of attrition as they move through the educational pipeline. Approximately 9,700 or 0.24 percent are expected to attain the Ph.D. in science and engineering.

Source: National Science Foundation.

Set quantitative goals for recruiting, retaining, and graduating more U.S. students in the sciences and engineering, especially from underrepresented groups. Departments should set similar goals and take responsibility for assuring that more students from these groups attain doctorates and obtain faculty positions. Forgivable educational loans could be provided to students from these groups who agree to pursue faculty careers.

Provide child care for families of students and faculty, particularly because extended hours in laboratory research are crucial to professional success in science and engineering.

Forge effective partnerships between institutions which have significant enrollments from underrepresented groups and departments of science and engineering at research universities so students have access to advanced coursework and equipment.

Establish transfer centers with qualified counselors in 2-year colleges and vocational-technical schools to ensure the maximum flow of talent from these to 4-year institutions.

Action: The States should:

Develop quantitative plans for public higher educational institutions to recruit, retain, and graduate more students in science and engineering, especially those from underrepresented groups.

Offer scholarships in science and engineering to be honored at a public institution in that State to the top high school graduates, especially those from underrepresented groups.

Link articulation between 2-year and 4-year institutions so that 2-year college students would be encouraged to obtain the bachelor's degree in science and engineering.

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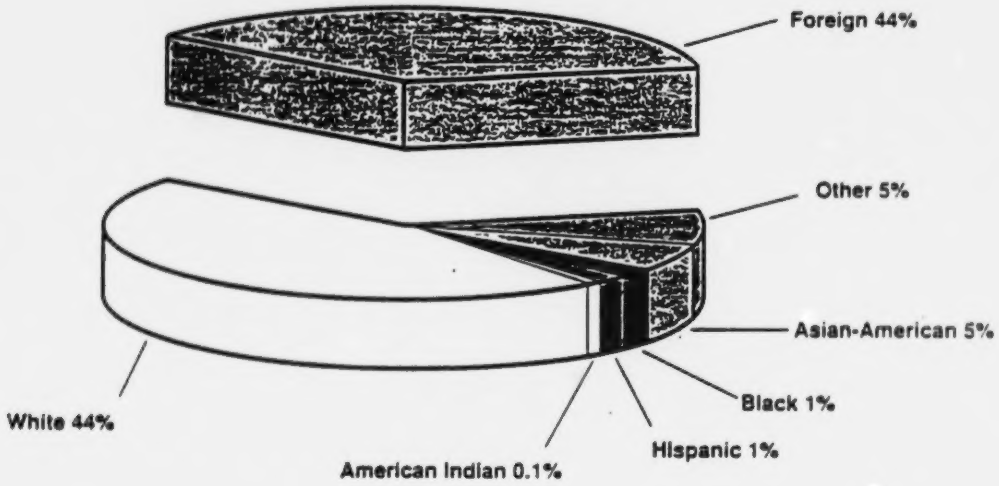
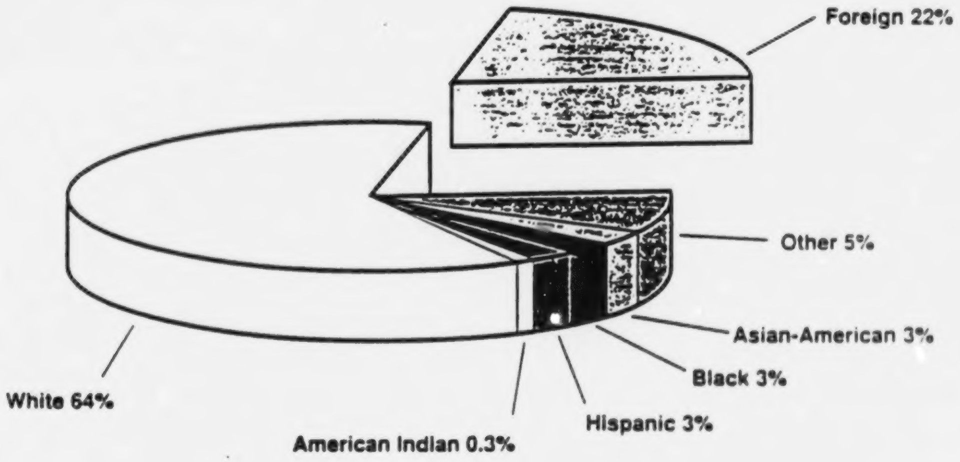
Figure 8

Distribution of Graduate Students, 1986

ENGINEERING



SCIENCE



U. S. students' declining interest in science and engineering carries through to graduate school where the participation of foreign nationals has increased dramatically in recent years.

Source: National Science Foundation.

Action: The Federal Government should:

Establish a National Research Scholars Program in Science and Engineering. The program should enable qualified high school students to have early research experiences and to earn the bachelor's degree in a science or engineering field. It should be tailored to attract minority and women students and students with disabilities, and aim to transform the size and makeup of the science and engineering workforce for a generation.

Provide stable and substantial support for effective intervention programs that graduate quality scientists and engineers who are members of underrepresented groups.

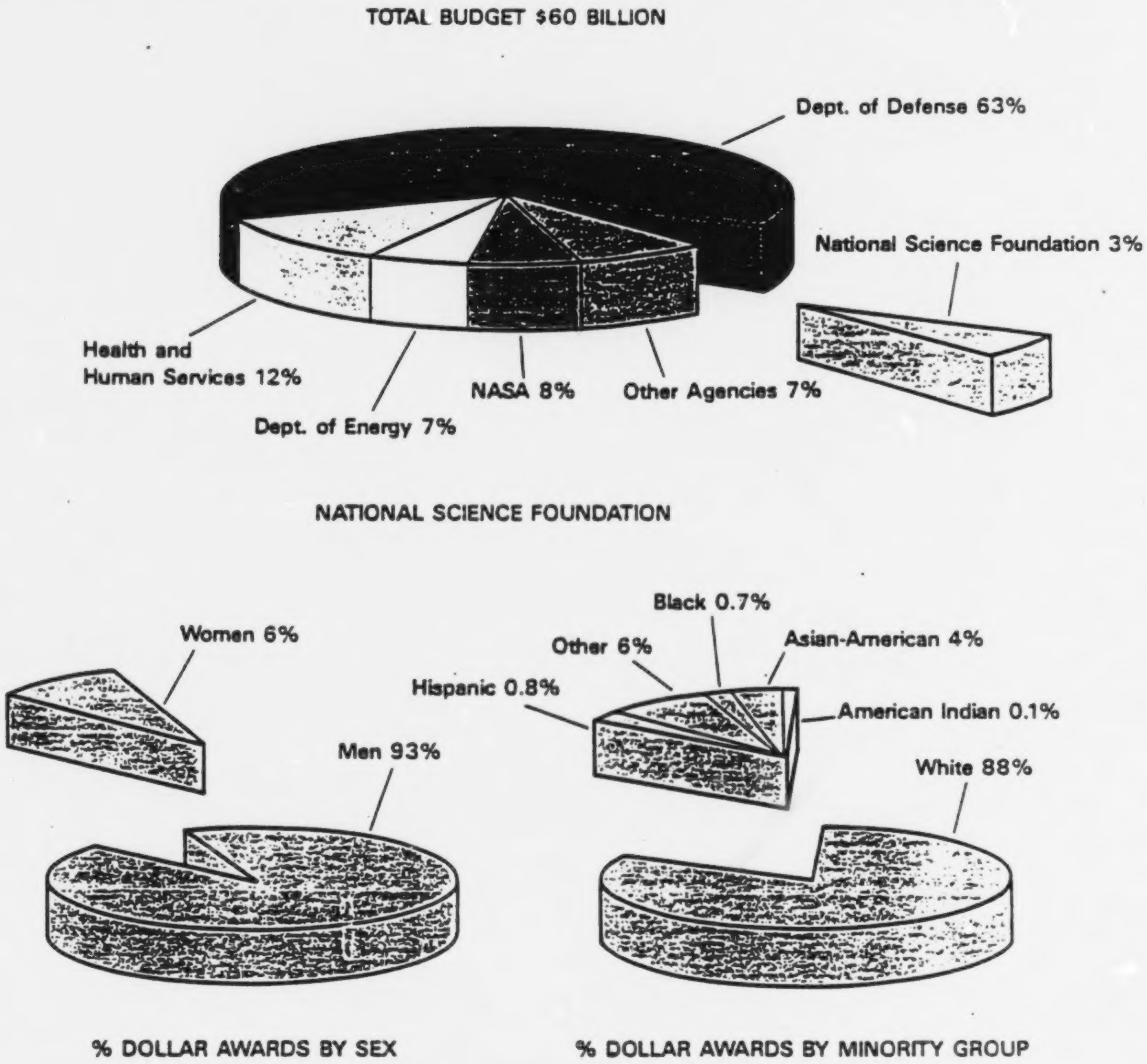
Establish a National Graduate Student Research Opportunities Program, targeted at minority and women students and students with disabilities, which provides fellowships and research assistantships for pursuing advanced degrees in science and engineering. This should be linked to the National Research Scholars Program to ensure continued support of these students to completion of the Ph.D.

Action: Industry should:

Through their industrial foundations, provide college scholarships and fellowships to members of the underrepresented groups who are motivated to major in science and engineering and to teach those subjects at precollege and college levels.

Join and support alliances with Federal agencies and minority and majority universities aimed at increasing the number of graduates and researchers who are minority group members, women, or people with disabilities.

Figure 9
Federal R & D Budget and Awards, 1987



The National Science Foundation is the only Federal agency which maintains statistics on the share of its research and development dollars awarded to women and minorities.

Source: National Science Foundation.

IV. Federal Research and Development

The Nation invested $123 billion, or 2.8 percent of the gross national product, in research and development in 1987. Of this amount, the Federal Government spent approximately 50 percent, or $60 billion. These Federal funds are being spent not only within Federal agencies, but in industry, nonprofit institutions, and universities. They are most visible on university campuses, where Federal funds support nearly two-thirds of all research and development.

The Federal Government is a pacesetter in the Nation's research and development enterprise. An important issue of Federal science policy, therefore, is how the Federal Government can use its research and development leverage with educators and industry to build a world-class science and engineering workforce that reflects and exploits the new demographics of our changing America.

However, the Task Force found that Federal agencies have neither recognized nor begun to address the demographic issues that will affect the conduct of research and development in the 21st century. Until now, the role of minorities, women, and people with disabilities in science and technology has been widely seen only as an equity issue, not as the key to future national security and economic competitiveness.

The Task Force, for example, made a major effort to identify how Federal research and development programs affect the development of the scientific and engineering workforce, particularly its impact on the careers of underrepresented groups. Only one Federal agency, the National Science Foundation (NSF), representing 3 percent of the 1987 total Federal research and development budget, keeps data to monitor the demographic characteristics of those who receive its grants. These statistics show that in 1987, 6 percent of all NSF dollars were awarded to women, 0.8 percent to Hispanics, 0.7 percent to Blacks, and 0.1 percent to American Indians. All Federal science agencies need to begin to collect similar data and to assess the way their activities affect this issue.

Women

Composition.

Women are now 51 percent of the population and 45 percent of the Nation's workforce, yet they comprise only 11 percent of all employed scientists and engineers. In 1986 women earned 30 percent of all bachelor's degrees in science and engineering, 34 percent of the Ph.D.s in the life sciences, but only 16 percent of the Ph.D.s in physical sciences and 7 percent in engineering.

Background.

Despite continued career gains, women have not been choosing careers in science and engineering in the same proportions as in the nonscientific professional, business, and management areas. Women who do enter the science and engineering workforce tend to be paid less and promoted less often than white men. In 1985, women were only 13 percent of all college and university science faculty and 2 percent of engineering faculty. They were more than twice as likely as men to be in nontenure-track positions.

Women scientists and engineers also face two special problems. Even when women score higher academically than men, because of their work situation they are more likely to lose self-confidence and feel less satisfied. During their 20s and 30s – just when their career demands the most time – women need to make decisions about childbearing. One institutional response to this dilemma is Stanford University's 24-hour daycare program for faculty, staff, and students.

The pipeline.

In graduate school, a far smaller portion of women than men complete the Ph.D. This may be because women are more likely than men to be self-supporting during this period. They are also more likely to be assigned teaching assistantships, where they deal with students, rather than research assistantships, where they work with mentors and peers.

Model programs.

Thus far few intervention programs have addressed the unique needs of women, particularly in the employment area. Some intervention programs in the education arena are meeting with success.

Purdue's Engineering School's support program for women has helped raise the proportion of female engineering students from 2 percent to 21 percent. Purdue is one of the few schools that retains women engineering students at the same rate as men.

Smith College conducts summer workshops for teams of teachers and counselors to help them become proactive in advising young women to enter science fields.

The Math/Science Network, started at Mills College and expanded throughout the Nation, encourages young women to take a full complement of mathematics courses and exposes them to science and engineering careers. About 70,000 students participate annually.

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Of Federal programs established to give minorities and women access to science and engineering, we found the Minority Access to Research Careers (MARC) of the National Institutes of Health closest to what we need today. MARC is a prime example of a successful Federal intervention program. It was established to remedy the low numbers of minority biomedical scientists nationwide. Over 800 students and 56 institutions have participated in the program since 1977. A 1984 survey found that 76 percent of former MARC students had enrolled in a graduate or professional school program. The National Institute of Health's Minority Biological Research Support (MBRS) is also effective in enhancing the research careers of faculty.

GOAL #4

Federal research and development funds influence the Nation's entire science and engineering effort. They generate new knowledge, and employ and train scientists and engineers. These funds should be leveraged to help develop a more diverse, world-class generation of scientific and engineering workers by the year 2000.

Action: Each Federal agency should review, within one year, its entire research and development budget, including both mainstream and special programs, and report the impact of the budget on the Nation's science and engineering workforce, especially in terms of representation of members of minority groups, women, and people with disabilities. The Office of Management and Budget should instruct all Federal research and development agencies to collect and maintain data on the participation of minorities, women, and people with disabilities in their research and development programs.

People with Disabilities

Composition.
An estimated 36 million people of working age in the United States have some disability, yet the National Science Foundation found only 94,000 working scientists and engineers in 1986. The numbers are uncertain because many people with disabilities do not identify themselves on surveys.

Background.
Progress in medical technology is improving the health and survival rates of newborns and accident victims, and both the number and proportion of the population with disabilities are growing. Now that schools are required by law to provide mainstream education for all children, more people with disabilities are being prepared to enter the workforce.

However, scientists and engineers with disabilities are more likely to be unemployed and underemployed than other scientists and engineers. An employer's willingness to hire and promote a person with a disability is frequently hampered by an institutional culture marked by prejudice.

Technology is making it practical for people with disabilities to pursue careers where intellectual ability, and not physical prowess, begets success. For example, reading machines can provide blind persons with quick access to any document. Machines that translate voice into text in real time will soon enable hearing-impaired students to participate more easily in lectures and seminars. Wide dissemination of such aids can enable more people with disabilities to enter science and engineering.

The pipeline.
Low expectations are keeping students with disabilities from participating in a full mathematics and science curriculum, particularly in science laboratory courses.

Model programs.
The State of Massachusetts Rehabilitation Commission works with students who have disabilities by helping them to determine the technical aids and other support they will need to fulfill their job goals. The program has enabled a number of the students to become scientists and engineers.

The IBM Corporation makes special efforts to hire people with disabilities, including scientists and engineers, and has instituted many special programs and policies designed to facilitate their employment and productivity.

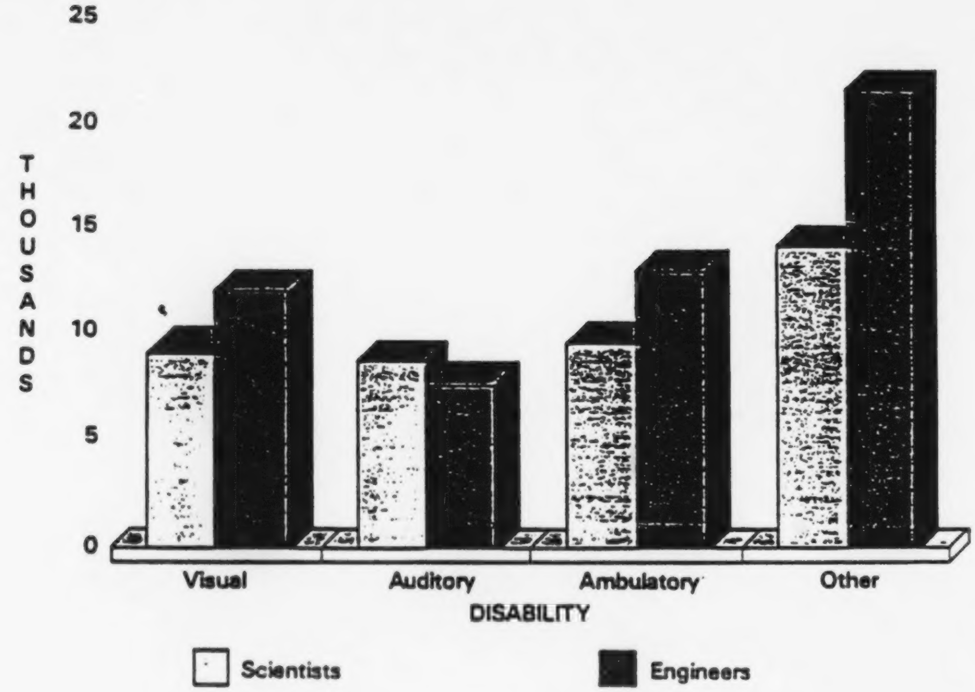
Action: Each Federal agency should, based upon the evaluation of its programs, construct a timetable for mainstreaming all special programs for underrepresented groups, with explicit benchmarks and milestones for measurement of progress toward achieving defined objectives.

Action: Each Federal agency should develop a plan showing how its research and development programs can bring about a new, more diverse world-class workforce. They should propose devoting substantial parts of their budgets to this policy goal. The plan should include programs related to preK-12 education, higher education, research and development awards, and employment.

Action: Federal agencies and Federal laboratories should use their facilities to provide hands-on laboratory experience to a significant number of students at all educational levels, and to in-service teachers, particularly from underrepresented groups. Federal scientists and engineers should use paid leave to serve as mentors and role models.

Action: Federal agencies should reproduce the Minority Access to Research Careers (MARC) program and Minority Biological Research Support (MBRS) program in the fields of physical sciences and engineering. The models should be extended to women and people with disabilities as well.

Figure 10
Characteristics of Disabled Scientists and Engineers



Of the 4 million scientists and engineers in the U.S., only 94,000 or about 2 percent identify themselves as disabled. Engineering and computer science are the most frequent field choices of persons with disabilities.

Source: National Science Foundation.

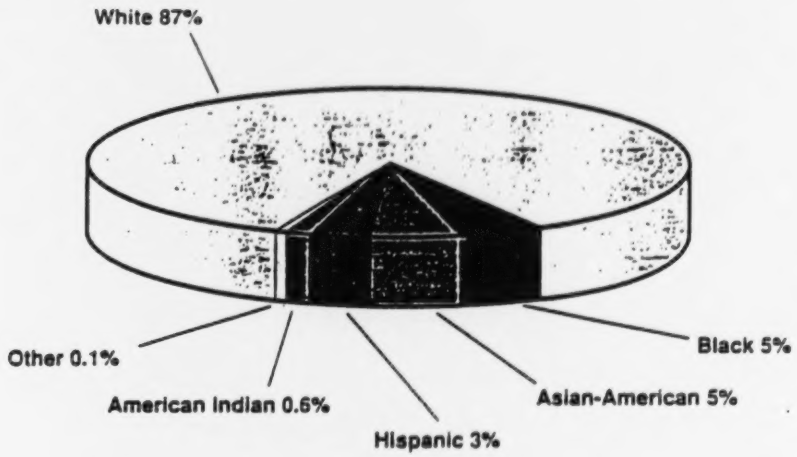
Action: The Department of Labor's Office of Federal Contract Compliance should direct its efforts towards greater focus on those Federal contractors who utilize research scientists and engineers if continued increased minority and female participation in these sectors is to occur.

Action: Each Federal agency should increase the number of minority group members, women, and people with disabilities on its science- and engineering-related advisory boards and committees.

Action: A Federal Coordinating Committee for Science, Engineering, and Technology (FCCSET) should be established by the White House Office of Science and Technology Policy to provide visibility, coordination, and accountability for agency achievement of plans. The FCCSET would receive reports, plans, and data from Federal science agencies and coordinate agency efforts. It should communicate with the National Action Council as the Action Council monitors national progress.

Figure 11

Federal Scientists and Engineers, 1987



The Federal government employs almost twice as many scientists and engineers who are women and minorities in 1987 as 1977. Women grew from 7 percent of the science and engineering workforce to 15 percent over this period.

Source: U. S. Office of Personnel Management.

V. The Federal Government as Pacesetter

Historically, underrepresented groups tend to cluster in fields they perceive as friendly and where they can exercise their talents fully, without discrimination and with good chance of recognition and reward. Employers nationwide must make science and engineering jobs attractive to these groups. If they fail to do so, minority-group members, women, and people with disabilities will see little or no role for themselves at the top of the science and engineering professions. They may decide that the years of graduate and postgraduate work and foregone income are not worth the effort. As a result, they may not develop to their fullest potential as scientists and engineers, and the Nation will not reap the full benefit of their contributions.

The Federal Government has been a path for career entry and advancement for underrepresented groups. Federal employment has been open, for example, to people with disabilities due to veterans' preference rules adopted after World War II. Affirmative action and equal opportunity laws have spurred hiring and promotion of women and members of minority groups.

We recommend that the Federal Government now recognize as an additional urgent role the need to use its employment practice as a lever for expanding and diversifying the Nation's science and engineering workforce at all levels. The system should be as open as possible to entry-level personnel. It can widen the pool of entering scientists and engineers by providing internships for aspiring professionals. It can extend efforts to recruit scientists and engineers from among minorities, women and people with disabilities. It can make known the way benefits of Federal service compensate for salaries that are lower than in industry.

But in addition to competing for the present pool of underrepresented scientists and engineers, the Federal Government can help "grow its own" by involving itself in the entire education pipeline. It can also widen the pool by encouraging Federal employees wishing to enter science and engineering or upgrade their skills to obtain the necessary education, job experience, and training.

American Indians

Composition.

American Indians enrolled in the 278 recognized tribes in the lower 48 States and 300 Aleut and Eskimo villages in Alaska number 1.4 million. They make up 0.6 percent of the U.S. population and 0.7 percent of all employed scientists and engineers. They hold 0.3 percent of all bachelor's degrees and 0.16 percent of all Ph.D.s in science and engineering. In 1986, 37 Ph.D.s in science and engineering were awarded to people who identified themselves as American Indians.

Background.

Many American Indians, including those holding degrees and professional jobs, do not want to be mainstreamed into the general American community. For the most part they prefer to also maintain their separate tribal identity.

The pipeline.

Approximately half of the American-Indian population enrolled in tribes is under the age of 21 and receives an elementary and secondary education in mathematics and science that parallels that in poor rural areas. Teacher turnover is high. Role models from their own group are few; in Bureau of Indian Affairs schools, less than 16 percent of the teachers are American Indians. Mathematics teaching tends to be by rote; there is little laboratory science. Many of the students who do enroll in college return home before they graduate.

Model programs.

The American Indian Science and Engineering Society (AISES) has an exemplary program that encourages American Indian students to pursue college science and engineering majors. In 1987-88, AISES had 627 student members. Through on-campus chapters, students receive peer support, assistance in finding jobs, and tutoring.

The United South and Eastern Tribes operate a health care-science internship program in partnership with the National Institutes of Health and the Food and Drug Administration. The program arranges jobs for American Indian students in these agencies' laboratories so that students gain research experience and see themselves as scientists. The aim is to provide the incentive for students to complete the college science degree and go on to graduate or medical school.

With the assistance of the Office of Personnel Management, the Task Force studied the 236,757 current full-time scientists and engineers employed with the Federal Government in 1987. The aim was to determine the representation and rank of men and women, Blacks, Hispanics, Asian-Americans, American Indians, and employees who identified themselves as disabled. We found that overall employment of Federal scientists and engineers increased 24 percent between 1977-87 while employment of women and minorities approximately doubled. An important opposite trend was the 5 percent decrease in the number of employed scientists and engineers with disabilities, perhaps due to retirements of World War II veterans and polio victims.

Although substantial gains have occurred, Federal employment has not kept pace with the increase in women scientists and engineers emerging from the education pipeline. In 1987, only 10 percent of the Ph.D.s employed were women, although women earned 17 percent of the Ph.D.s awarded in science and engineering. Further, their proportion of the entire Ph.D. population had risen to 15 percent.

In a matched cohort of Ph.D.s, in 1987, after 10 years in the Federal service, 57 percent of all women, 65 percent of the Black, Hispanic, and American Indian men, 71 percent of the Asian-American men and 75 percent of white men scientists and engineers were making $50,000 or more a year in 1987.

Goal #5:

The Federal Government should continue to be a pacesetter in developing a work environment that is accessible, equitable, and favorable to attracting and advancing groups now underrepresented in science and engineering.

Hispanics

Composition.

The U.S. Hispanic population is the fastest-growing minority group, and comprises 9 percent of our population. It includes Cuban immigrants who tend to be members of the middle class and Mexican-Americans and Puerto Ricans who are more frequently of lower socioeconomic status. Forty percent of Hispanic children live in poverty.

Hispanics constitute 2 percent of all employed scientists and engineers, and hold 2 percent of all bachelor's degrees and one percent of all Ph.D.s in science and engineering.

Background.

Most Hispanic parents have high aspirations for their children but they often do not encourage them to go to college, particularly if this requires that they move from home.

The pipeline.

Overwhelmingly enrolled in schools in poverty areas, many Hispanic children are hampered by an inadequate basic education, including poor instruction in mathematics and science. Of the Hispanic youth who go on to higher education, 43 percent go to 2-year colleges. That percentage is closer to 60 percent in States with a large community college system. Hispanics do not have a network of 4-year colleges to nurture indigenous talent as Blacks do with the Historically Black Colleges and Universities.

Model programs.

The Math, Engineering, and Science Achievement (MESA) programs in communities in the West and Southwest are a prime example of a successful intervention program. This partnership between schools, universities, and industry identifies talent, offers tutoring and counseling, and provides role models from industry to spark student interest in maintaining good grades in school. A key aspect of the program is parental involvement. MESA centers are working with 131 high schools and reaching about 4,000 students a year. The project reports that 90 percent of these students go to a college or university, and 66 percent are science and engineering majors.

The Hispanic Mother-Daughter Project at Arizona State University focuses on 8th-grade girls, building on the strong mother-daughter relationships intrinsic to Hispanic families. The project prepares young women for higher education and increases their career aspirations. In some cases, mothers are pursuing college degrees along with their daughters.

Action: Each Federal agency with requirements for scientists and engineers should review its existing Federal Equal Opportunity Recruitment Plan (FEORP), and use it as a guide to develop agency-specific data for hiring, advancing, and retaining under-represented groups in science and engineering. The data collected will be forwarded on an annual basis to the Federal Coordinating Committee for Science, Engineering, and Technology committee of the Office of Science and Technology Policy and to the National Action Council, which will monitor progress.

Action: The plan should include a provision for funding technical aids in order to facilitate the hiring and advancing of disabled professionals who require this kind of accommodation.

Action: Federal agencies should offer visible career ladder programs for entrants from under-represented groups into the science and engineering career fields.

Action: Agencies should establish outreach public awareness programs to present science and engineering as prestigious and rewarding careers, and to promote the concept that professionals in Federal service can develop their talents to maximum potential without discrimination and with recognition and professional esteem.

Asian-Americans

Composition.

Asian-Americans make up only 2 percent of the U.S. population, but they are a much larger proportion – 6 percent – of the science and engineering workforce. They hold 4 percent of all bachelors' degrees and 7 percent of the Ph.D.s in science and engineering.

Background.

There is a contrast between Asian-American involvement in science and engineering and participation by other minority groups. One explanation is socioeconomic: many Asian-Americans came from the middle and upper classes of society in their country of origin and remain in these socioeconomic groups in America. Another explanation may be the influence of the Asian-American culture, which places a high premium on hard work, obedience to authority, and respect for education.

Studies of patterns of mathematics and science learning in Japan and China show that Japanese and Chinese parents believe that every child can be proficient in mathematics and science if the child works hard; low student achievement is due to less effort. By contrast, American parents are more likely to believe that mathematics and science proficiency stems from innate talent, with low achievement due to lack of ability. And even though American schoolchildren are offered less material in school, American parents are more satisfied with their children's educational progress and the schools they attend than are Japanese and Chinese parents. Many Americans take high school dropout rates of 25 percent for granted, whereas some Japanese become alarmed if the rate reaches 5 percent.

It is important to remember, however, that Asian-Americans are diverse in socioeconomic makeup and national origin. Some Asian-Americans, particularly refugees and second- and third-generation youth, perform less well.

The pipeline.

Asian-American students consistently score highest on the Scholastic Aptitude Tests. They also excel in science and engineering fields in college. Preference for careers in quantitative fields, however, does not extend to Asian-American women, who drop out of the education pipeline at about the same rate as other American women.

Model programs.

Some programs are trying to transfer the values and habits of achieving Asian-American students to members of other groups. The Professional Development Program at the University of California, for example, uses one Asian-American ingredient of success: group study. Using this and other methods, the Black and Hispanic students in the program now score better in calculus than many other students.

VI. The Influence of Culture

Parents and the home shape values. They can give children positive attitudes and skills that make them interested in and comfortable with mathematics and science. There is strong evidence that parents' expectations are strongly associated with children's participation in science-related activities. Some homes, including many Asian-American ones, are conducive to nurturing these values. Other groups can learn from them.

Young people are, to a great extent, influenced by the popular culture— television, movies, video, music. The percentage of 17-year-olds watching television 3 or more hours a day, rose from 26 percent in 1978 to 56 percent in 1986.

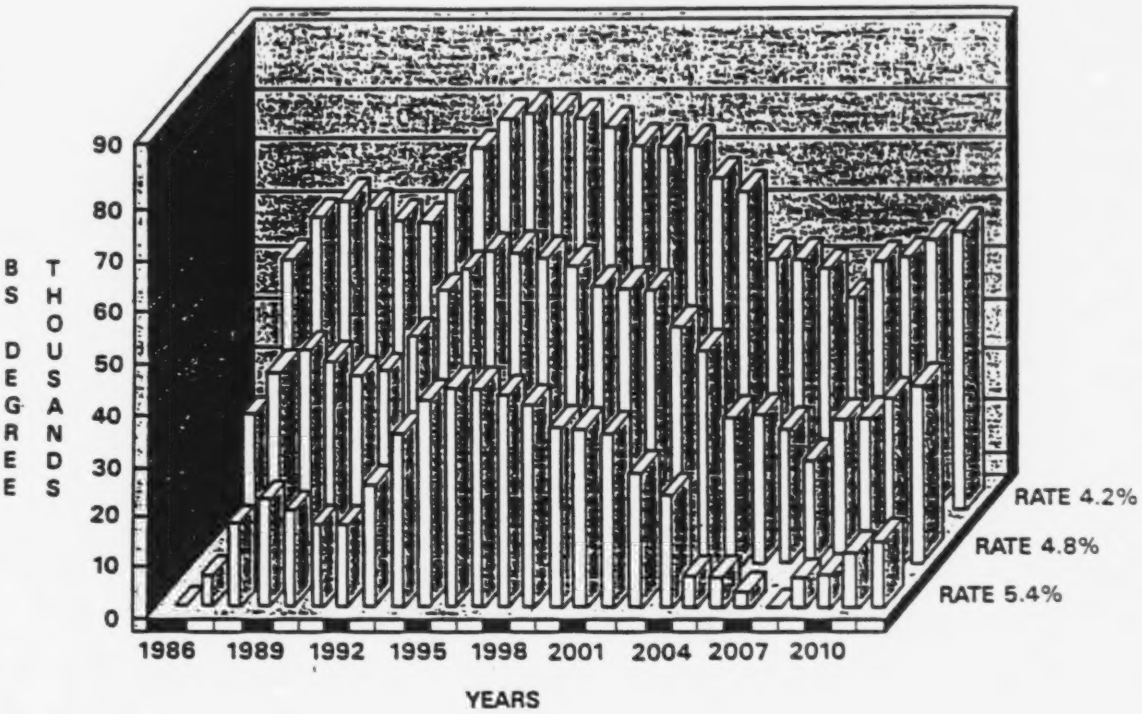
We heard many complaints during our public hearings that the entertainment industry has created powerful negative stereotypes. Scientists are depicted as mad wizards or "nerds"; women are shown as helpless or sex objects. The industry glorifies the human body as "good" only when it is beautiful and complete. Disfigured people are often portrayed as oddities and rarely shown as competent or as heroes.

The entertainment industry's portrayal of high technology as evil or laughable, along with the industry's stress on materialism and instant gratification, are antithetical to the values required to pursue science or engineering. To enter these fields young people must swim against the powerful currents in the mass culture. It is hardly surprising that so many students drop mathematics and science as soon as the decision whether or not to continue is put in their hands.

The entertainment industry and television can be a powerfully positive tool in a national initiative to bring more kinds of people into science and engineering. A television series on lawyers sparked a rise in law school enrollments. A recent movie about Navy fliers increased naval recruitment. A film such as "Stand and Deliver" can excite our youth about learning mathematics. "Square One" and "3-2-1 Contact" are public television shows that engage young children in mathematics and science. A recent survey, for example, found that 50 percent of all U.S. 10-year-olds had watched "3-2-1 Contact" at some time, and 13 percent had watched it regularly.

Figure 12

Shortfall of Future B.S. Degrees in Science and Engineering



Projected shortfalls of future B.S. degree holders are related to the declining number of young people in our population. Three scenarios are presented based on the percent of 22-year-olds earning bachelor's degrees, starting with 4.2 percent which was the rate experienced in the early 1970s. It is estimated that the rate would have to rise to 6.8 percent to eliminate the shortfall.

Source: National Science Foundation.

More than half of the children who watched also engaged in some science activity as a result— a finding that suggests that the power of television is under-exploited. And it is important to note that positive responses did not vary with socioeconomic status, sex, or race.

We call on the entertainment industry to act in partnership with schools, business, and the community to increase the attractiveness and importance of mathematics and science to American youth and to purge negative images.

Goal #6:

Our Nation's future hinges on having an ample supply of people who achieve in mathematics and science, are science-literate adults, and perform technical jobs with world-class competence. The entertainment industry and the mass media—powerful influences in shaping society's values—must participate in reshaping popular attitudes toward science and engineering.

Action: Videos, recordings, and other entertainment materials that awaken interest in science and engineering, and explain their importance, should be readily available to community groups, libraries, and museums, especially in low-income areas.

Action: A task force of representatives from the entertainment industry should report within the next 18 months on how this industry, along with the mass media, can spark the imagination and values of all Americans, including our youth, to reach the six national goals set forth in this report.

Conclusion: We Can Change America

The problem we face in the science and engineering professions stems from powerful underlying forces in American society, including discrimination, poverty, and deficits in education.

Poverty continues to grip a large number of children, including a disproportionate share of minority children. The Nation's public schools have traditionally provided a common pathway to the American dream of economic opportunity, but today the schools are hard pressed to serve the needs of children-at-risk. Most elementary and secondary schools do an inadequate job of preparing students in mathematics and science. Colleges and universities recruit too few science and engineering students, particularly students from underrepresented groups and do not retain enough through completion of the bachelor's degree. Graduate departments are not widening their pool of Ph.D.s with enough American students, especially those from underrepresented groups. The problem is continued by employers who have not yet opened career paths widely and visibly enough to prospective talent. It is further exacerbated by the mass culture.

Each sector of the Nation's science and engineering workforce, accustomed to operating independently, must now work with all the others towards a set of common goals.

The Task Force has outlined six goals and associated actions to change America. We are confident that change can occur.

We urge the Nation to share our goals of an America in which all citizens receive a quality education, have access to economic opportunity, and are the informed voters that a free society demands.

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Law Establishing the Task Force

Public Law 99-383

Sec. 8. (a) It is the purpose of this section to establish a task force on women, minorities, and the handicapped in science and technology to:

(1) examine the current status of women, minorities, and the handicapped in science and engineering positions in the Federal Government and in federally assisted research programs;

(2) coordinate existing Federal programs designed to promote the employment of women, minorities, and the handicapped in such positions;

(3) suggest cooperative interagency programs for promoting such employment;

(4) identify exemplary State, local, or private sector programs designed to promote such employment; and

(5) develop a long-range plan to advance opportunities for women, minorities, and the handicapped in Federal scientific and technical positions in federally assisted research, and to coordinate the activities of participating agencies with the Committee on Equal Opportunities in Science and Engineering established by section 36 of the National Science Foundation Authorization and Science and Technology Equal Opportunities Act (42 U.S.C. 1885c), after the termination of the task force established by this section.

(b) For purposes of this section, the term "participating agency" means

(1) the National Science Foundation;
(2) the Department of Health and Human Services;
(3) the National Aeronautics and Space Administration;
(4) the Environmental Protection Agency;
(5) the Department of Agriculture;
(6) the Department of Defense;
(7) the Department of Education;
(8) the Department of Energy;
(9) the Department of Commerce; and
(10) the Department of the Interior.

(c) (1) The task force on women, minorities, and the handicapped in science and technology shall be composed of individuals appointed by participating agencies pursuant to this subsection.

(2) The head of each participating agency shall appoint two individuals to serve as members of the task force. If an appointed member is unable to serve for the duration of the task force, the head of the participating agency who appointed that member shall appoint another individual to fill the vacancy.

(3) Task force members may be appointed from private business, academia, professional associations, or nonprofit foundations.

(d) The task force shall prepare and submit a report on its findings and recommendations to the President, the Congress, and the head of each participating agency not later than December 31, 1989.

(e) The Office of Science and Technology Policy shall call the first meeting of the task force not later than 90 days after the date of enactment of this Act, shall ensure that each participating agency has appointed two members, and shall assist the task force to meet its objectives.

(f) (1) Members of the task force not otherwise employed by the Federal Government shall be reimbursed for travel, subsistence, and other necessary expenses incurred by them in carrying out the duties of the task force.

(2) The Director of the National Science Foundation shall make provision for administrative support of the task force, and may enter into agreements with the heads of other participating agencies to facilitate the work of the task force.

(g) The task force shall terminate on January 31, 1990.

ACTIVITIES TO HELP STUDENTS EXPLORE TECHNOLOGY CAREERS

This material describes a few ideas and activities that may be useful to you in helping students explore and understand various career options. We've also included activities geared specifically toward exploration of the technology careers related to Tech Prep--the mid-level range of vocational and technical careers which require some occupational training in high school up to an Associate Degree either to enter the field or to qualify for advancement. (See examples on the last two pages of this handout.)

Many of these ideas and activities you may already use or be familiar with. You may also have career-related activities that you've collected from your own experiences, or you may have ideas to improve some of the activities presented here. In any case, we included several places where you can add your own ideas, notes, or resources for future reference.

While several of these activities are grouped under age categories, most activities could be modified to fit any age or grade level.

Listed on page 7 are three sources where several of the activities in this handout originated. Listed on pages 8-11 are several career-related resources that may also be useful to you.

GENERAL ACTIVITIES FOR ALL AGE LEVELS

1. Develop school or classroom resource collections on different mid-level technology careers. Whenever possible, include materials in different media--print, video, filmstrips, etc.

2. As a class assignment, start a collection of newspaper and magazine articles and other brief descriptions on career-related topics (could also include job announcements from the paper on different mid-level technology positions in our area that list salaries and requirements).

3. Coordinate field trips to local companies where jobs are available in one or more of the four technology cluster areas: industrial/engineering technology, business, health, and public service. If possible, try to have tour coordinators set up "hands-on" exercises to help students actively explore various career-related concepts.

4. Have speakers from different technology areas address student groups. Ask speakers to include examples or samples of materials, set up exercises or demonstrations, etc. to help students get more involved with the presentation. Ask speakers to help students understand how math, communications, science, teamworking, and problem-solving skills are used in that particular career area.

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5. Collect different materials that are used locally in various jobs that can be used to teach or demonstrate certain concepts in the classroom. Explain a little about the type of job where these materials are used (i.e., a quality control chart, a blueprint, a diagnostic chart, etc.)

MIDDLE/JUNIOR HIGH SCHOOL

1. Use career games, puzzles, or projects that would get students working together, exploring different career-related concepts, or thinking about various career opportunities. (1:103)

2. Have students spend a day with their parents at work or have students "interview" their parents or other relatives about their jobs. (1:96)

3. Form "strength groups"--weekly sessions where students discuss what they can do best. Discussions could also include some basic career exploration activities where students talk about the kinds of careers where their strengths would be helpful and/or important. (1:70)

4. Conduct a "people pyramid" exercise. On the blackboard, list as many occupations as possible that are involved in manufacturing a specific product such as a textbook. Construct a people pyramid that illustrates how these jobs lead to the final product, emphasize how all these jobs relate to one another. Discuss each job and what it involves. (Using the example of a textbook, a salesperson and truck driver might be on the highest level of the pyramid because those are jobs closest to the final product; the second level might include printer, proofreader, bookbinder; the next level might include a writer, artist, editor; the next level might include a paper maker, lumber jack, etc.). (1:146-47)

5. Have someone employed in a mid-level technology career come in an talk to the class. (Have students prepare questions ahead of time dealing with how he/she decided on that career, what he/she does on the job, classes in school that were the most important in preparing for the job, and what he/she likes the most or least about the job, etc.) Afterwards, discuss what students might do to assist them in choosing a career, preparing for a career, etc. (2:244)

6. Have a "career month", develop bulletin boards or posters highlighting different mid-level technology careers or career clusters, display "tools of the trade" related to that career and how school subjects relate to careers or to materials used in that career; change careers or clusters each week and have speakers come in who are working in the career area being highlighted. (2:265)

7. Have students visit their area career center, an occupational class at the high school, or an area technical college. Several activities could revolve around these visits such as having students find answers to a list of questions discussed previously, choosing a career cluster of interest and visiting departments or classes involving that cluster, having students come up with their own series of questions to "research" once they arrive at the college or career center, etc.

8. Set up a panel discussion of recent high school graduates who are now in two-year college programs preparing for technology careers. Have panel members talk about what they're studying now, what kind of job they expect to have when they finish, fears they had and how they overcame them, subjects that were particularly important in high school, etc. (1:103)

9. List several mid-level technology careers, have students read some information on the careers and list 2 reasons why they would or would not consider going into that career. Discuss some of the positive and negative responses that students presented.

10. Use a "problem bucket" in which students anonymously contribute problems or fears that they have about choosing a career (or that they would have about entering a career in a specific field like electronics) or about continuing their education after high school. Discuss some of the problems and possible solutions in small groups or as a class. (2:266)

11. Conduct a "match-up" exercise where a number of different careers requiring various levels of preparation are needed (i.e., vocational training, technical or two-year college, baccalaureate, etc.). Have students match the careers with the levels of training needed. (You could also expand the matching columns to include typical starting salaries for each area using local figures.) Discuss what types of tasks a person would do in some of the different careers that students are interested in. (2:266)

12. Start a "shadow" or "mentoring" program where students could spend half a day with an engineering technician, a police dispatcher, a nurse, medical lab technician, a robotic welder, etc.

13. Develop some projects that students could do in cooperation with a career center or high school occupational class in the area. For example, a project where the student might have a "buddy"--someone enrolled in a vocational program--where some product is developed or exercise is conducted. The visiting student might then do some library research and relate his/her experience to a particular job where that product or experience is involved.

14. Have students obtain a catalog from one of the technical colleges and select a technology program for a class project. The student might answer questions like: What job(s) would this qualify me for? What academic/vocational courses could I take in high school that would prepare me for this program and/or that could qualify me

for advanced placement (college credit)? What would be interesting or not so interesting about this program?

15. Try the "Agree or Disagree" exercise which allows students to explore their values and concerns about workplace and career issues. Make four signs and place them in different corners of the room for the following categories--"strongly disagree", "strongly agree", "tend to disagree" and "tend to agree". Then announce the statement you have chosen as the discussion topic such as, "Everyone should attend college", or "Girls can be engineering technicians", "Parents should choose which career path is best for their children", etc. (Note: You may need to review some key terms before beginning the exercise.) Ask students to think about the statement and then to go to the corner that best describes their opinion. Ask students in each group to discuss their reasons for choosing that corner and follow-up with a general class discussion. Have students return to their seats and then ask them to go to the corner they believe their teachers or parents would choose. Repeat the discussion process. Conclude the exercise with some general discussion on what influenced their decision, what factors might cause them to change their original position, why there might have been differences between their opinion and their perceptions of the opinions of their parents/teachers, and how they felt if their choices were in the minority. This exercise can promote greater self-awareness, decision-making and critical thinking as the foundation for improving career exploration. (3:22)

16. Try the "Volunteer a Career" exercise which helps students discover career options that build on interests they already have. (You might want to start this just before the students will be on a short break such as spring vacation.) First, write several career titles on the chalkboard--veterinary technician, radio announcer, nurse, etc. Second, ask students to write down their hobbies, interests, activities, etc. and to think about how these might help them fit into one of the careers. Then discuss the examples--how students who like to work with animals might be gaining skills applicable to veterinary technology or how volunteering at a nursing home might be providing skills and insights useful for becoming a nurse, etc. (Since some students may express interests/hobbies that are not applicable to any of the careers listed, start a class discussion to identify career choices that would better fit those students' interests.) Then ask students to identify some careers held by adult relatives or friends that they find interesting. During the break, have students "shadow" the person whose job they are interested in, being sure you've given them some suggestions previously for the types of things they should look for and try to do. After break, hold a class discussion on the activity and ask students what they did, how they enjoyed it, whether or not they might want to have a similar career, etc. (3:23)

Other Ideas (middle/junior high school):

HIGH SCHOOL

1. Have students list a least six factors they are seeking in a career (travel, opportunities to meet people, salary, responsibility, opportunities for advancement, etc.). Have students discuss their interests in groups and the types of mid-level technology careers they think might provide them with what they are seeking.

2. Devote a section of the school newspaper to highlight various mid-level technology careers in our area and/or school alumni who are working in various technology positions. (2:325)

3. Have students compare and contrast different aspects of careers that are related but that require different levels of education--baccalaureate versus associate degree level (i.e., engineer and engineering technician, medical technologist and medical lab technician, professional nurse and technical nurse, accountant and junior accountant, etc.).

4. Encourage students who plan to work part-time to seek employment in areas that relate to their future career goals or to general areas that they might be interested in for a future career (i.e. business, health, public service, retail, etc.)

5. For a class project, have students interview an area employer and gather information on skills or attributes that the employer is looking for in prospective employees (i.e., academic/technical skills, experience, interpersonal communications skills, etc.). Have students write a paper or present the results of their research in an oral report.

6. Have a panel of individuals employed in various technology careers speak to classes or student groups. Panel participants who are recent technical college graduates and who are fairly close in age to the students in the group may help students relate to what's being presented. (The panel might be selected to purposefully include males, females, and minorities as successful role models in nontraditional careers.)

7. Start a "shadow" or "mentoring" program where students could spend half a day with an engineering technician, a police dispatcher, a nurse, medical lab technician, a robotic welder, etc.

8. Start an "alumni program" where graduates of the high school who have pursued technology training and careers agree to come back and participate in career days or address student groups about their post-high school education and career experiences. (Similar programs are used at the college level where graduates of a certain program agree to contact students considering that particular college or program.)

Other Ideas (high school):

REFERENCES

1. Evans, R., Hoyt, K. & Mangum, G. Career Education in the Middle/Junior High School. Salt Lake City, Utah: Olympus Publishing Co., 1973.

2. Herr, E. and Cramer, S. Career Guidance and Counseling Through The Life Span: Systematic Approaches (3rd ed.) Glenview, Illinois: Scott, Foresman and Company, 1988.

3. Mason, N. Career Guidance: The Teacher's Role. Vocational Education Journal, February 1992, p. 22.

ADDITIONAL SOURCES OF INFORMATION FOR TEACHERS AND COUNSELORS

BOOKS

All the books listed below are available for loan through the PACE Office to teachers and counselors in Anderson, Oconee and Pickens County schools.

1. Boyle, K. and Whelden, E. Career Information in the Classroom: Workshop Guide for Infusing the Occupational Outlook Handbook. Columbus, OH: National Center for Research in Vocational Education, 1986.

2. Brown, S. and Brown, D. Designing and Implementing a Career Information Center. Garrett Park, MD: Garrett Park Press, 1990.

3. Cetron, M. Jobs of the Future: The 500 Best Jobs--Where They'll Be and How to Get Them. New York, NY: McGraw-Hill, 1984.

4. Chapman, E. The Fifty-Minute Career Discovery Program. Los Altos, CA: Crisp Publications, Inc., 1988.

5. Farr, J. M. and Martin, K. America's 50 Fastest Growing Jobs. Indianapolis, IN: JIST Works, Inc., 1991.
6. Feingold, S. and Miller, N. Emerging Careers: New Occupations for the Year 2000 and Beyond. Garrett Park, MD: Garrett Park Press, 1983.

7. Feingold, S. Futuristic Exercises: A Workbook on Emerging Lifestyles and Careers in the 21st Century and Beyond. Garrett Park, MD: Garrett Park Press, 1989.

8. Gale, B. and Gale, L. Discover What You're Best At. New York, NY: Simon and Schuster, 1982.

9. Hull, D. and Prescott, C. High-Technology Careers: A Guide for Counselors. Waco, TX: Center for Occupational Research and Development, 1984.

10. Kennedy, J. Career Book. Lincolnwood, IL: National Textbook Company, 1988.

11. Kimeldorf, M. Job Search Education. New York, NY: Educational Design, Inc., 1988.

12. Petras, K. and Petras, R. Jobs '91. New York, NY: Prentice Hall Press, 1991.

13. Rettig, J. Careers: Exploration and Decision. Belmont, CA: David S. Lake Publishers, 1986.

14. Russo, J. Careers Without College: No B.S. Necessary. White Hall, VA: Betterway Publications, Inc., 1985.

15. Sacharov, A. Offbeat Careers: The Directory of Unusual Work. Berkeley, CA: Ten Speed Press, 1988.

16. Smith, C. Glamour Careers. New York, NY: Monarch Press, 1985.

17. South Carolina Employment Security Commission. South Carolina Job Search Assistance Guide. Columbia, SC: Employment Security Commission, 1989.

18. Southworth, S. Exploring High Tech Careers. New York, NY: Rosen Publishing Group, 1988.

19. U.S. Government Printing Office. Occupational Outlook Handbook. Washington, D.C.: Department of Labor, 1991.

VIDEOS

All the videos listed below are available for loan through the PACE Office to teachers and counselors in Anderson, Oconee and Pickens County schools.

1. American Society for Medical Technology. Clinical Laboratory Science: Career Opportunities. Washington, DC: Author, 1990.

2. Frank Paxton Company. 21st Century Skills Series. Kansas City, MO: Author, 1988.

3. Guidance Associates. Careers In Health Services: Opportunities for You. Mount Kisco, NY: Author, 1989.

4. Industrial Technology Education Association. Women in the Machining Industry. Reston, VA: Author, 1988.

5. National Tooling and Machining Association. Go For It: Careers in Tooling and Machining. Fort Washington, MD: Author, 1990.

6. North American Veterinary Technician Association. The World of the Veterinary Technician. West Lafayette, IN: Author, 1990.

7. Paseornek, M. Are You Ready? A Documentary Video About Career Planning for Youth. Dallas, TX: JCPenney Co., Inc., 1990.

PERIODICALS

Career Opportunities News, six issues per year/$25.00 prepaid. Order from:

Garrett Park Press
P.O. Box 190M
Garrett Park, MD 20896

Occupational Outlook Quarterly, four issues per year/$6.50 or $13.00 for two years. Order from:

Bureau of Labor Statistics/Publication Sales Center
P.O. Box 2145
Chicago, IL 60690

CAREER BRIEFS

Chronicle Guidance Publications produces career briefs that are short and easy to read. There are over 590 career descriptions available. Many mid-level technology careers are included in the collection. You can order 1-9 copies of an individual brief for $2.00/brief, or 10 copies or more for $1.60 per brief (prices as of 3/11/92). For more information, contact:

Chronicle Guidance Publications, Inc.
P.O. Box 1190
Moravia, NY 13118-1190 (800-622-7284)

CAREER GAMES (Available at the Anderson Education Center--224-3253; prices listed below are as of 3/11/92.)

"Employment Bingo", catalog number MM41160, Media Resources, $14.99. (up to 16 players, junior high to adult)

"Steady Job Game", catalog number MM41161, Media Resources, $9.99. (2-4 players, grades 4-12)

"Working Choices", catalog number MM8507, Media Resources, $19.99. (4-6 players, grades 4-12)

"Supermarket Flashcards", catalog number MM4149, Media Resources, $9.99. (grades 1-adult)

OTHER SOURCES

Many professional associations publish career brochures and videos that are available at a very reasonable cost. (A few examples are the "Nuclear Medicine Technology" brochure published by the Society of Nuclear Medicine, the "Pathways to Careers in Communication" brochure published by the Speech Communication Association, and the "Preparing for a Career in the Medical Laboratory" brochure published by the American Society of Clinical Pathologists.) Most public libraries and technical college libraries have reference books available listing addresses of professional associations.

Careers, Inc. publishes and distributes many paperback books and other materials describing a variety of careers. (You can also order the Occupational Outlook Handbook and the latest supplement to the Dictionary of Occupational Titles through this company.) To receive a catalog, contact:

Careers, Inc.
Educational Researchers and Publishers
1211 10th St., S.W.
P.O. Box 135
Largo, FL 34649-0135 (800-922-7337)

One career exploration program that many area teachers and counselors have found helpful is "Go for the Goal" available through the Clemson University Extension Service. You can receive a free copy of the basic program and information on how to purchase some relatively inexpensive computer software that complements the program by contacting your local extension agent.

Technical colleges are also a great resource for information on technology careers and related educational programs. Libraries and counseling centers have many print materials (and some video materials) on various career options. Tours to the various departments can be arranged and department faculty can often help in speaking to student groups on careers and employment options in their fields. Contact the marketing or admissions office at one of the area technical colleges.

In addition, business people are often very willing to speak to classes and student groups and many will assist you in arranging plant tours or shadowing activities for your students. Most districts have business-education partnerships that might provide some good contacts for locating speakers. Another possibility would be to call the personnel director of a particular business and ask for some suggestions and/or assistance. The PACE office has also published a guide to area business speakers who are available to visit middle/junior high and high school classes and other student groups. If you're interested in receiving a copy of the Guide, please call Donna Branham in the PACE office (646-8361, ext. 2107).

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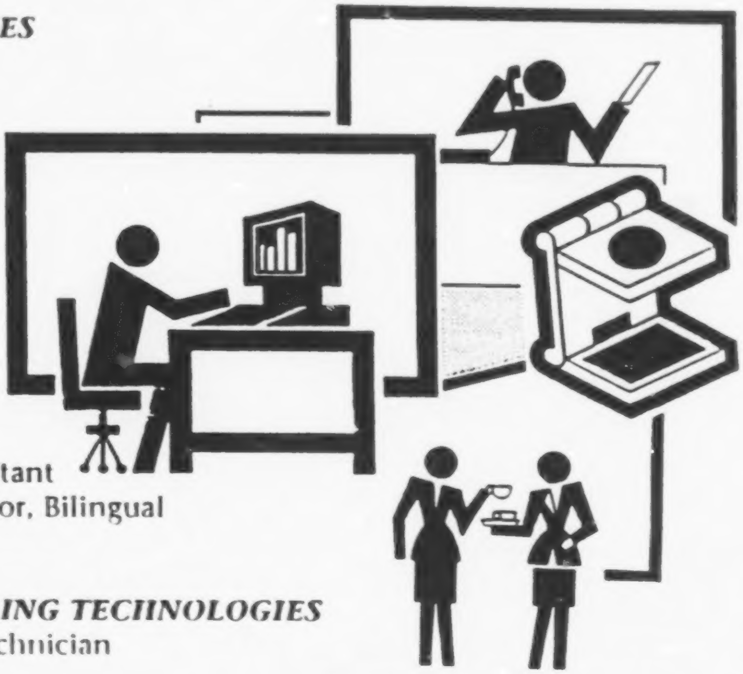
Tech Prep: *PREPare for an Exciting Career in the TECHnologies*

Tech Prep is designed to prepare you for one of many rewarding careers in the mid-level technologies—careers that require some vocational training in high school up to an associate degree (i.e., a college degree awarded for completion of two years of postsecondary work at a two-year/technical college).

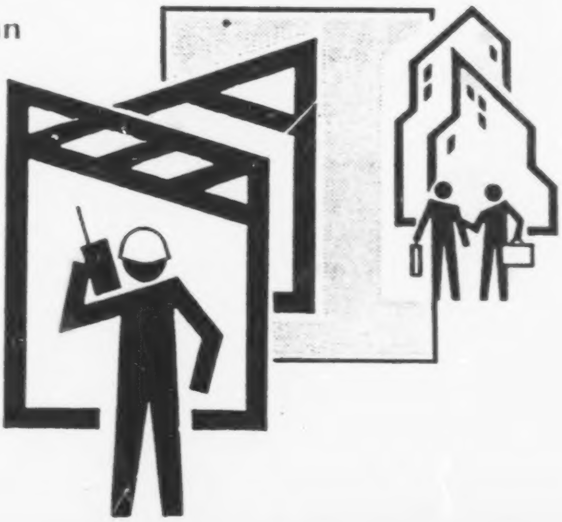
BUSINESS TECHNOLOGIES

Accounting Technician
Personnel Assistant
Business Associate
Buyer
Human Resources Clerk
Computer Coordinator
Graphics Director
Data Base Analyst
Food Service Director
Cosmetologist
Restaurant Manager
Audio/Video Technician
Agricultural Science Assistant
Export Service Coordinator, Bilingual
Executive Secretary



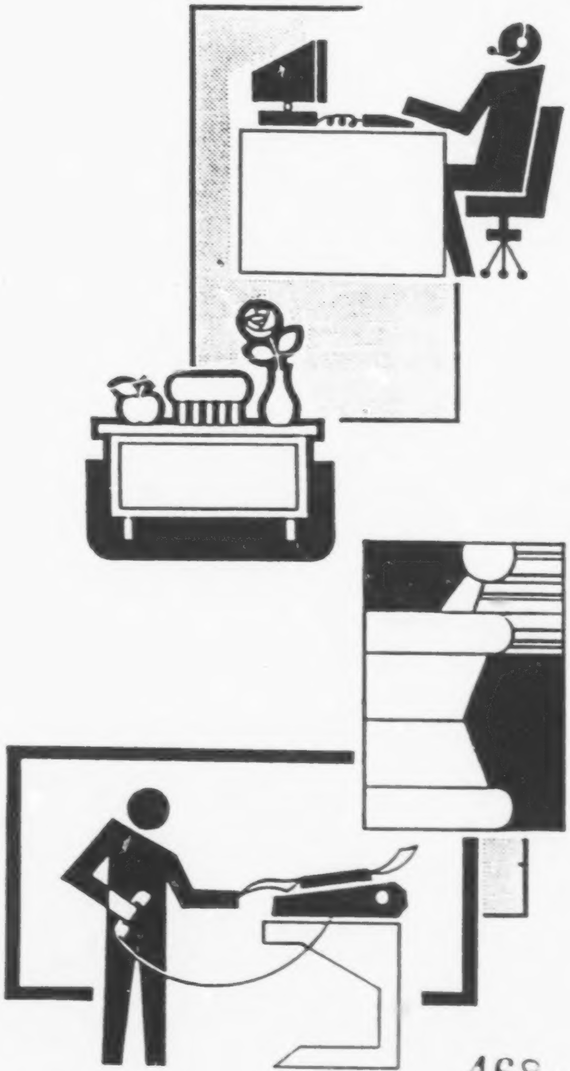
INDUSTRIAL/ENGINEERING TECHNOLOGIES

Fiber Optic Electronic Technician
Biology Technician
Automated Manufacturing Technician
Mason
CNC Machine Technician
Chemical Laboratory Technician
Computer Technician
Design Technician
Electromechanical Technician
Engineering Technician
Forensic Evidence Technician
Industrial Electronics Technician
Process Engineering Technician
Quality Assurance Technician
Television Engineering Technician



These pages were taken from Crescent High School's 1992-93 Career Planning Guide. PACE thanks Mrs. Adams at CHS for allowing us to use this material here.

The careers listed on these two pages are just a sampling of the many technology positions available through area businesses. In fact, all the job titles you see here were taken from actual advertisements listed in local newspapers over the past few years. These career areas and many others in the mid-level technologies are growing rapidly across the state and the nation. Your key to future career success is having the right education! Start now, work hard and plan wisely for your future.



PUBLIC SERVICE TECHNOLOGIES

Fire/Safety Marshall
Child Center Teacher
Emergency Services Dispatcher
Public Information Specialist
Regulatory Compliance Coordinator
Legal Services Secretary
Paralegal
Police Officer
Environmental Sampling Technician
Nutritional Specialist
Criminal Investigator
Rehabilitation Technician
Codes Specialist
Case Manager
Activity Therapist I

HEALTH TECHNOLOGIES

Ultrasonographer
Surgical Technologist
Medical Laboratory Technician
Dental Assistant
Sterile Processing Technician
Sleep Technician
Radiology Technologist
Registered Nurse
Licensed Practical Nurse
Pharmacy Technician
Medical Transcriptionist
Physical Therapy Assistant
Veterinary Technician
Labor and Delivery Technician
Assistant Director of Nursing